



## INSIDE DOPE

by GEORGE F. TAUBENECK

Why Russia Is Expanding Power of the 'Intellectuals' They Change Their Minds It Seemed Like a Good Idea At the Time

### Why Russia Is Expanding

One school of historians (the followers of Hegel) has tried to prove that all wars are started for economic reasons.

For example: an overpopulated land will invade an underpopulated country, so as to gain what Hitler called *lebensraum* (more room to live). Or, a tribe living on poor soil will try to capture the greener pastures owned by a neighbor. Loot, say the Hegelians, is the root of all warfare.

But these historical interpreters ignore the observation that religious fanaticism starts wars, too. The "heathen," refusing to be converted, must be conquered and forced to worship the new god. (That's a cardinal tenet of militant religions.)

This latter type of diabolical impulse is the emotional drive which stirs the Russians and their Communist Fifth Columns today.

Russia has more of everything—more land, more people, more natural resources—than any other nation. She doesn't need *lebensraum*. Why, then, has she annexed the relatively poor Baltic and Balkan states? Economically, these territories are liabilities.

Answer: She wants to convert more national groups to the peculiar Communist Religion.

Observe proof that Communism is a Fanatic Religion can be found in the fact that other nations do not maintain active "fifth columns" in Russian territory—or anywhere else in the world. America's Republican Party, for example, makes no attempt to win converts to its economic philosophy in England, France, Argentina, or anywhere.

Yet democratic Republicanism—the highly successful chance-to-get-ahead system—is surely more worthy of evangelizing than is the defeatist, leveling creed of Communism.

Democrats and Republicans aren't religious fanatics. They're sane men. But all democratic republicans (and the United States is a Republic) must face the fact that some day a horde of insane religious zealots will try to conquer us and make us their slaves. If they win that war, you and I will recant our democratic heresy, and kiss the Hammer-and-Sickle Red Flag, or else we'll be tortured or killed—along with our families and friends.

So long as the democratic republics produce a higher standard of living for their peoples than do the Communists, we shall be a threat to the existence of the latter. They'll have to destroy us, lest the illusion fostered by their own religious tenets be destroyed in turn.

### Power of the 'Intellectuals'

During the last half century the Communist Ideal has been the pet project of too many articulate "intellectuals" in too many nations. These so-called "intellectuals"—writers, teachers, and ivory-tower dreamers—have been Communism's greatest asset.

For the sake of argument, let us admit that most of these intellectuals have been "sincere" (whatever that means). Let us agree that they were sorely upset by the inequities, the injustices, and the inequalities which they saw all around them. Let us acknowledge that they were honest in their belief that Communism or Socialism (both were untried theories, until recently) would give

(Concluded on Page 15, Column 1)

## Supply Wholesalers, Fight Looms On Electrical Union Wage Demands

FRENCH LICK, Ind.—Both manufacturers and wholesalers are going to have to get out and sell during 1948 if manufacturers are to maintain the high production rates to which their plants are now geared, Harrison J. Hedrick, manager of Mills Industries' refrigeration division, told members of the Midwest Refrigeration Wholesalers Association here recently.

Mr. Hedrick spoke at an open meeting attended by 19 wholesalers or their representatives and eight manufacturers representatives. The conclave, held on Saturday, Nov. 8, followed closed sessions on Friday and Saturday in which wholesalers had discussed business conditions among themselves.

Outlining the manufacturers' viewpoint on sales, Mr. Hedrick declared that manufacturers must sell their products to maintain their production rates.

If they could not move all their production through existing outlets they would have to look around for new ones, he indicated.

Wholesalers pointed out that there are now many new manufacturers in the field and there were not enough wholesalers to handle them.

"How are these new manufacturers to sell their products unless they go outside the present normal channels of distribution," they asked.

The manufacturers' representatives assured the wholesalers that the manufacturers were anxious to support them in doing their selling job.

During the closed meetings, the wholesalers discussed the problem of

NEW YORK CITY—The announced intention of the electrical workers' union to seek higher wages brought gloom last week to those who were hoping for some price reductions in refrigeration and appliance products. However, there was evidence that some of the major manufacturers were planning to combat demands for wage increases.

Replying to Union charges that General Electric "profiteering" is at an "all-time peak," the firm ran full-page newspaper advertisements stating that present-day profits are below normal.

The union viewpoint was expressed here by officials of the C.I.O. United Electrical Radio and Machine Workers representing approximately 130,000 workers at 92 G-E plants. The group declared itself in favor of "wage increases, stabilized prices at reduced levels, and restrictions on 'profiteering.'"

It further endorsed a declaration that G-E profits "are even exceeding . . . profits during the war years."

In a full-page newspaper advertisement G-E countered the union claims with a series of graphs and public statements. Titled "How Big Are General Electric Profits?", the advertisement featured a double row

(Concluded on Page 32, Column 1)

## Freezers Shipped by Association Members Total 133,409 for 12 Mos.

WASHINGTON, D. C.—Members of the Farm and Home Freezer Manufacturers Association who reported their sales to the Association headquarters here, shipped 133,409 home freezers of all sizes in the 12-months' period from October, 1946, through September, 1947.

Production for the same period totaled 135,919 units, leaving the stock-on-hand figure as of Sept. 30 as 2,987 units.

Average unit selling price as reported by the manufacturers was \$240.77.

The manufacturers who submitted their figures were not listed in the report. Since the greatest size category in which the greatest number of sales was reported was the 11 to 15.9 cu. ft. classification, it might be assumed that the report did not include the output of some of the major producers of smaller home freezers.

(Table of shipments by size by month is published on page 4.)

## Electric Power Petitions For Reorganization

PHILADELPHIA—Electric Power Equipment Corp. here, manufacturer of refrigeration products and power switching equipment, has petitioned the Federal Court for permission to reorganize under Chapter X of the Chandler Act.

Harold C. Stott, president of Elliott-Lewis Electrical Co., Inc., electrical equipment wholesaler, and A. Robert Bast, vice president of the Land Title Bank & Trust Co., Philadelphia, were appointed as trustees by the court and a hearing has been set for Dec. 29.

In a communication to the field the company stated that the trustees announced that it is their intention to continue the business and that the present management shall act as agents for the trustees.

Electric Power Equipment Corp. suffered heavy damage to one of its two plants here in a fire early in October. While losses were covered by insurance, the claims are still being adjusted.

## Restored Credit Controls Possible, Materials Allocation Unlikely

Best Guess on What Special Session Will Bring

### Say Truman Has Power To Restore Credit Law

WASHINGTON, D. C.—It is beginning to look as if Federal control over consumer instalment credit may be restored in the very near future.

Just before Regulation W expired Nov. 1, "official sources" here predicted that President Truman would ask Congress to re-establish controls when it meets in special session Nov. 17. At the same time, the Federal Reserve Board protested relaxation of credit terms.

Meanwhile, others have urged the revival of controls. One of those strongly supporting such a move is Ohio's Senator Taft.

"Personally, I regretted it when we terminated credit controls, and I think they should be restored," Sen. Taft is reported as stating. "The general question of credit control has always been a function of government."

It was pointed out by Rep. Jesse Wolcott, chairman of the House Banking Committee, that President Truman can restore controls at once without submitting the proposal to Congress. He said this is possible through an "escape clause" in the repealer bill, along with the Trading With the Enemy Act, which permits the President to proclaim an emergency and order down payments as high as 100%.

But Mr. Wolcott believes renewal of credit curbs would be senseless. He asked:

"What good does it do to require a one-third down payment on a refrigerator as long as a person can buy a diamond ring by paying 50 cents down and 50 cents a week?"

Further opposition to Federal controls came from Lehman Plummer, vice president of the Central National

(Concluded on Page 32, Column 3)

## Wage-Hour Officials Trying To Include Retailers, Is Charge

WASHINGTON, D. C.—The unauthorized encroachment of the Federal Wage and Hour Law Administrator on purely intra-state retailing operations, contrary to the original intent of Congress, and the growing attempt to impose centralized control through a Federal administrative agency, directly affects a multiplicity of small businesses throughout the country, the National Retail Furniture Association declared in a presentation to a House of Representatives Sub-Committee on Wages and Hours.

There is no question of substandard wages, it was stated, because the take-home pay of retail furniture store employees far exceeds the Wages and Hour requirements. The issue

(Concluded on Page 4, Column 4)

## Superior Valve Elects Siegfried Gen. Mgr.

PITTSBURGH—Willis A. Siegfried has been elected vice president and general manager of Superior Valve & Fittings Co. here, manufacturer of valves and other accessories for refrigeration systems.

In his new duties he will be first assistant to the president, in whose absence he will assume the duties performed by the president.

Siegfried joined the company as assistant to the sales manager in the summer of 1944. In 1945 he was made sales manager and became vice president in charge of sales in 1946.

### Opposition of Congress May Hit Allocating

WASHINGTON, D. C.—As the nation awaits the opening of the special session of Congress Nov. 17, called to deal with the question of aid to Europe, the refrigeration and appliance industries wait to see how the measures adopted may affect their operations.

Most likely manner in which they might be affected would be through any program calling for an allocation program on steel and other scarce materials. This has been suggested by some of those advising the President.

Some of the best informed sources say that allocations probably won't be invoked. *Iron Age*, metal working publication, predicts that new controls on exports will be created, but the program will be launched with the steel industry retaining control of domestic steel distribution.

The desperate needs of U. S. steel consumers and the recommendations of the Harriman Committee make an expansion of exports for next year unlikely, it was said. The Marshall Plan steel requirements call for about 60% of 1947 exports in the coming year. The program will be largely one of allotting steel exports by "directives" to such European countries as are believed to have the greatest need.

Congressional opposition will probably also put the damper on any allocations plan. Sen. Taft, Republican leader, has announced his own opposition to reimposing price controls or rationing.

"Surely," said Sen. Taft, "we should ration the rest of the world on steel, grain, and oil before we even consider rationing our own people. If we don't want higher prices we will have to reduce exports to the rest of the world."

## 'Launderall' Dealers Get Coin Meter Setup

DETROIT—The coin-operated automatic washing machine field has been invaded by the F. L. Jacobs Co. of Detroit with the announcement that Launderall coin meters have gone into production for immediate delivery.

Sales of coin-operated Launderalls will be made through the regular Launderall distributor-dealer organization and will not be given to any outside company, it was announced by Edward A. Ash, Director of the Appliance Division, F. L. Jacobs Co., Launderall manufacturer.

The coin meters are being shipped by the Jacobs Co. from its Indianapolis plant, and the initial supply will be already installed in Launderall

(Concluded on Page 4, Column 5)

## Set Dec. 1 Court Hearing For American Thermal

DETROIT—Hearing will be held Dec. 1 in Federal District Court here as to whether American Thermal Industries, Inc. will continue to operate under the present management or whether a trustee or trustees will be appointed.

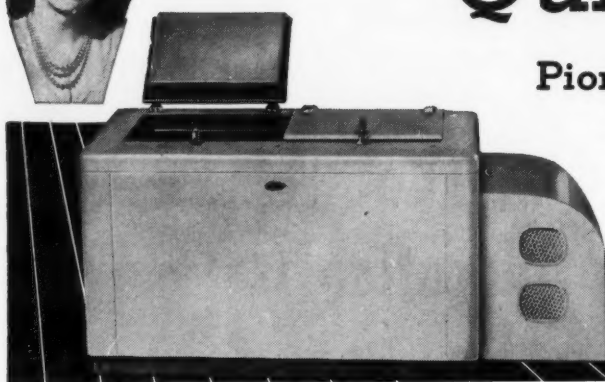
The company, which manufactures air conditioning and refrigeration equipment, had petitioned for reorganization and relief under Chapter X of the Bankruptcy Act earlier this fall, and has since been operating under a temporary "freeze" order issued by the Court.





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## Electric Water Heater Sales Rise In St. Paul, But Drop In Minneapolis

MINNEAPOLIS—While 134 more electric water heaters were sold in St. Paul during the first nine months of 1947 than in the comparable period of 1946, 321 less were sold in Minneapolis, it was reported by North Central Electrical Industries here.

Sales of electric ranges increased substantially in both cities.

A total of 524 heaters were sold in St. Paul in this year's period, compared with 390 in the first nine months of last year. Whereas sales of heaters in Minneapolis during last year's nine-month period totaled 833, the total this year was 512.

Range sales in Minneapolis rose from 1,007 in the first nine months of 1946 to 1,556 in the corresponding period this year. In St. Paul, 857 ranges were sold during this year's period, as against 545 in last year's period.

## Huggard, Fresh'nd-Aire Sales Director, Died In DC-6 Crash

CHICAGO—Dillon B. Huggard, sales manager of the Fresh'nd-Aire Co., Cory Corp. subsidiary, was one of the victims of the crash of the DC-6 plane in Bryce Canyon late last month.

Huggard had been associated with Cory Corp. for more than six years. He had held the post of sales director since 1943.

## Packaged Ice Cream Store Philco 9-Month Sales Gets Volume of Trade from Double 1946 Figure Owners of Home Freezers

PHILADELPHIA—Sales of Philco Corp. in the first nine months of 1947 totaled \$157,209,000 as compared with \$72,465,000 in the same period a year ago, and set a new high record in the history of the corporation, states John Ballantyne, president.

Net income of Philco in the first nine months of 1947 totaled \$5,632,005 after all taxes and charges including an inventory reserve of \$2,500,000 and a reserve for future research expenditures. These earnings were equivalent, after preferred dividends, to \$3.90 per share on 1,372,143 shares of common stock.

In the first nine months last year, the company had a loss of \$20,477 as a result of reconversion difficulties in the first and second quarters.

Sales in the third quarter of 1947 totaled \$49,267,000 as compared with \$57,754,000 in the preceding quarter. This decline was caused by a two-week factory shut-down for vacations, the beginning of production on new 1948 radio models, and withdrawal from the industrial storage battery business at the end of June. In the third quarter a year ago, sales amounted to \$35,386,000.

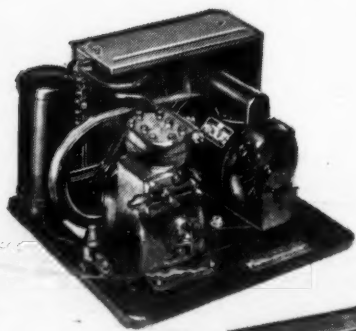
"Operations of Philco are currently exceeding all previous records in radio and refrigeration, and television is already an important source of income to the corporation," Mr. Ballantyne said. "Present indications are that sales in the fourth quarter will exceed the third quarter figure, so that total volume for 1947 should run well over \$200,000,000. Our plans in 1948 call for a further considerable increase in refrigerators, freezers, and television receivers."

## Community-Employe Relations Post at G-E Goes to Simons

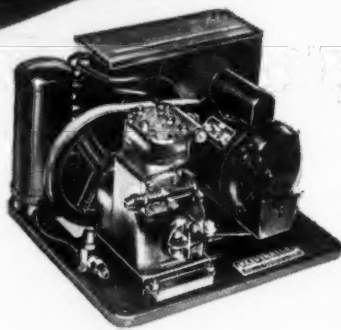
BLOOMFIELD, N. J.—George E. Simons, advertising manager of General Electric's Air Conditioning Department, has been named head of community and employe relations in addition to his present duties, G. R. Prout, vice president and general manager of the G-E department, has announced.

Simons, who will be on the staff of the general manager, has been manager of the advertising and sales promotion division at Bloomfield.

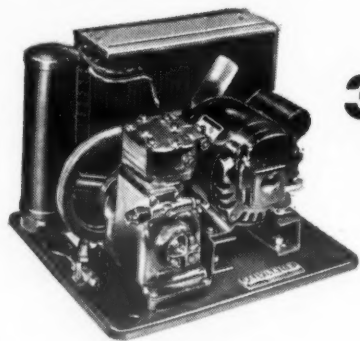
## With KELVINATOR condensing units you're three times sure!



### 1. TROUBLE-FREE PERFORMANCE!



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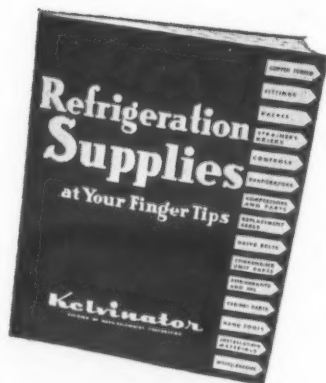


### 3. COMPETITIVE PRICE!

When it comes to condensing units that are precision-engineered, quality built, and priced to give you a competitive advantage . . . count on Kelvinator!

Dependable performance under all conditions is the result of Kelvinator's more than thirty years' experience in designing and building the finest refrigeration equipment. And for your convenience, there are 50 strategically located Kelvinator depots throughout the country. At any one of these depots you can quickly fill your needs for condensing units and obtain Kelvinator-made parts and supplies needed to make a complete installation.

For quick, friendly service, mail or phone in your order—or stop in personally . . . Kelvinator, Division of Nash-Kelvinator Corp., Detroit, Mich.



### GET YOUR COPY! New Handy Catalogue of Refrigeration Supplies

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Also Manufacture Dough Retarding Cabinets Self Serve Veggie-Cases Dry Beverage Coolers Self Serve Dairy Cases

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GRAND HAVEN, MICHIGAN, EST. 1898



## 'Legal Juggling' Brought Retailers Under Wage-Hr. Act, House Group Told

WASHINGTON, D. C.—A House subcommittee conducting hearings on proposed revisions of the Fair Labor Standards Act heard officials of retail businesses charge the Wage-Hour Administration with bringing many retail establishments under the law against the intent of Congress.

Representatives of the ice, coal, and lumber businesses complained that retailers were unduly burdened. They asked that exemptions in the act be clarified.

William J. Tobe, counsel for the National Association of Ice Industries, testified that the Wage-Hour Administrator interpreted the law as covering ice suppliers for railroad refrigerator cars despite the fact that Congress did not intend the act to cover production and distribution of ice.

Joseph T. King, attorney for the National Retail Lumber Dealers, said many retail stores had been brought under the act through "legalistic juggling" by the Wage-Hour Administration. Declaring that Congress had "clearly intended" to exempt retail establishments, he urged that such interpretations be prohibited.

Until a group of employees filed for \$36,000 in overtime wages, his company was unaware it came under the act, Clifford L. Swanson, proprietor of a Minneapolis retail coal business, told the subcommittee. A ruling in favor of the employees would force his firm out of business, Mr. Swanson declared.

## Reece, Inc. Handles Marvair Heat Pump In West Coast Area

FRESNO, Calif.—Rex R. Reece & Associates, Inc. here, manufacturers' agents, are now handling wholesale distribution of the Marvair heat pump for most of the west coast, Rex R. Reece has announced.

The firm, Mr. Reece said, has appointed a number of associate distributors to cover the dealer organizations in their areas. They include the H. B. Cheffins Co. here which covers the San Joaquin valley, Caldwell Systems, Inc. of Riverside, Calif. to handle the Imperial valley, and a privately owned Electric Power Co. to cover Oregon.

The Reece firm handles part of northern California and Nevada itself. Arizona and southern California are still being covered by individual dealers, Mr. Reece declared.

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R. R. Gregory, P. O. Box 104, Easton, Ill.  
R. E. Kenney, 4243 Crocker Ave., Minneapolis, Minn.

## Ice Cream Reach-In Helps Supplement Bakery Sales

ST. LOUIS—The Lichhalter's Bakery at Lucas and Broadway here, has realized many additional sales since a four-compartment ice cream refrigerator was installed in the shop.

"Ice cream is a 'natural' in the bakery shop," Harvey Rudee, manager, pointed out. "It goes with practically every one of our baked products and can be suggested to customers to use with cakes, pies, etc., pointing out that the taste-appeal of these various baked goods can be greatly enhanced with the addition of ice cream."

Mr. Rudee stocks the ice cream refrigerator with quarts, pints, and 5-cent ice cream specialties, and has found that customers appreciate the opportunity to purchase the ice cream right in the bakery instead of being forced to make a trip to another store for the purpose. Thus, in addition to giving the customer

better service, the bakery has accomplished excellent results in the way of additional profits from the sale of ice cream from the refrigerator.

The bakery has also added a line of delicatessen items for its customers' convenience. These are shown on two shelf fixtures and include fruit juices, jellies, coffee, etc., for use with hot rolls, or in the preparation of sandwiches.

## \$300,000 Fire Fails To Hurt Weber Plant

LOS ANGELES—The recent fire which caused approximately \$300,000 damage at Weber Showcase & Fixture Co., Inc., here "in no way impaired our ability to produce and ship equipment according to schedule," Karl Weber, president, assured customers.

The fire affected only a minor storage warehouse at the company's millwork division and did not involve the main plant and offices two blocks away. Major portion of the damage was done to more than 300 completed refrigeration units which were crated ready for shipment.

## Coleman Equipment Co. Buys Tuthill Pump Freezer Division

CHICAGO—Purchase of the freezer division of the Tuthill Pump Co. and the start of production on a 5-gal. ice cream freezer have been announced by the Coleman Equipment Co., Inc. here.

Although the principal construction of this freezer remains the same as the one manufactured by Tuthill, improvements in designing the appearance and the method of holding and dispensing, and in temperature and sanitization have been instituted, E. D. Snider, Coleman engineer, stated.

## Air Conditioned Market Opens

SAVANNAH, Ga.—Featuring year-round air conditioning, the new and enlarged Shore's Market at Henry and Montgomery Sts. here was opened recently.

The store is operated by Mrs. H. T. Shore and her son, Claude.

Robert Frankfield of the Electric Equipment & Repair Co. here handled the air conditioning job.

## H. F. Krantz Appointed Sales Head for Rigidbilt

CHICAGO—H. F. Krantz has been appointed general sales manager of Rigidbilt, Inc., announces W. W. Bradfield, president of the company.



He will direct sales of Rigidbilt air conditioning and steam heating coils, unit coolers, floor type product coolers, and other catalog items. In addition, he will have final responsibility for the sale of custom-built units designed and fabricated for a variety of special needs.

H. F. Krantz

Mr. Krantz comes to Rigidbilt from the position of midwestern representative of the Electric Power Equipment Corp. A graduate of the Illinois Institute of Technology, he served as an engineer with the Navy Department in Washington, D. C., until the outbreak of the war.

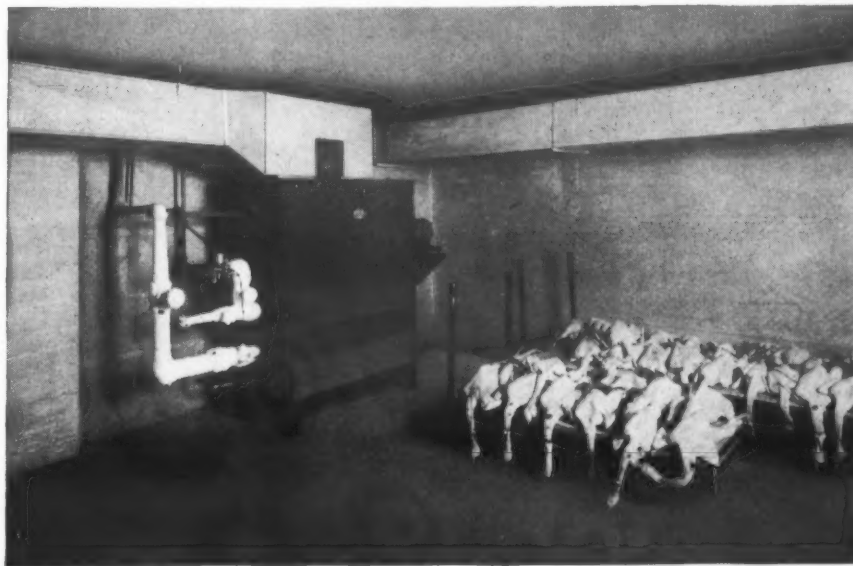
# BAKER ENGINEERING TODAY

## Better Refrigeration Tomorrow

BETTER REFRIGERATION is born on the drawing board—integrated step by step with each food-processing need. That is why your consulting engineer and architect will want to work closely with Baker engineers from the moment they first put pencil to paper. The Baker engineers will supply valuable advice in zoning the system and in designing efficient air distribution systems to save valuable space.

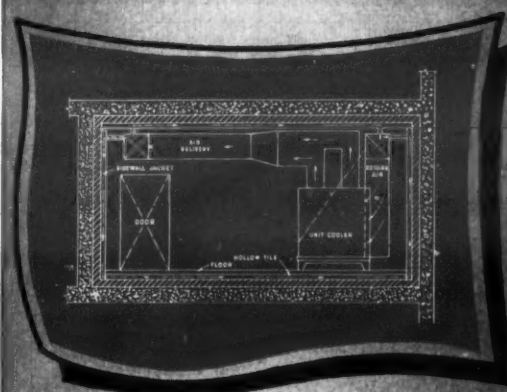
The finished Baker system is zone-balanced to each requirement from jacketed quick-freezing rooms to other low-temperature rooms, standard-temperature storage rooms, air-conditioned tempering rooms, work rooms and offices. Operation is economical, too. Baker units are designed and built to operate in harmony in the system, for efficiency, long life and low cost.

Today is none too soon to act on your future plans. Call your Baker distributor or write today for case histories of Baker Engineering at work.

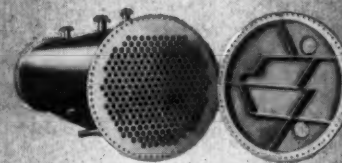


## BAKER REFRIGERATION

For Better Refrigeration Better Buy Baker

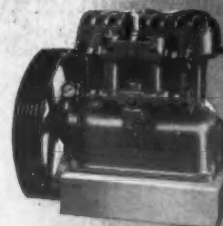


Jacketed quick-freezing room.  
Based on Baker U.S. Patent  
No. 1,947,444.

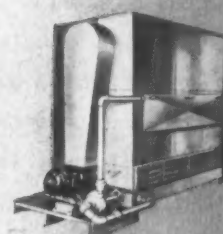


Baker Shell and Tube Condensers,  
Liquid Coolers, Liquid Receivers.

Baker Compressors  
and Condensing  
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and Freon.



Baker  
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Baker  
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SOUTH WINDHAM, MAINE

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- REACH-IN REFRIGERATORS
- WALK-IN REFRIGERATORS
- FARM MILK COOLERS

DIVISION OF WILSON CABINET CO., INC.  
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## Norge Sponsors Televised Hockey Games In Detroit

DETROIT — First television of hockey games in the Detroit area by Station WWJ-TV is being sponsored exclusively by the Norge division of Borg-Warner Corp. and Radio Distributing Co., regional distributor of the firm's line of household appliances, reports C. H. MacMahon, Norge director of advertising.

The telecasts will be made for all home games of the Detroit Red Wings with the Toronto Maple Leafs, played on Sunday nights, for the full Winter season. Two have been broadcast, and others will follow on Dec. 10, Jan. 11, Feb. 1, and March 31. Reception was said to be excellent on the games that have been aired, with cameramen able to follow the puck and the play.

Commercials are worked in through studio flashbacks which permit the showing of products and verbal description of their features.

## Gordon Gets Appliance Service Post with G-E

CHICAGO—Minot M. Gordon has been appointed appliance service supervisor for the General Electric Co. in the north central district, it has been announced by J. S. Strecker, district manager of appliance sales.

Mr. Gordon joined G-E's home laundry division at Bridgeport, Conn., in 1940 as a chief order clerk. In 1943 he was transferred to the product service division and later became home laundry equipment specialist.

## FARM AND HOME FREEZER MANUFACTURERS ASSOCIATION REPORT ON THE TOTAL NUMBER OF FREEZERS SHIPPED DURING THE PERIOD OCT. 1, 1946 TO SEPT. 30, 1947

Size (In Cu. Ft.)	4 to 6.9	7 to 10.9	11 to 15.9	16 to 20.9	21 to 29.9	30 and Over
1946						
October	919	405	1,521	3,508	539	12
November	1,041	545	2,036	2,102	669	96
December	3,278	326	3,645	1,796	375	224
1947						
January	3,116	920	4,515	2,786	570	226
February	1,660	920	4,845	2,569	325	249
March	2,363	780	8,813	2,436	533	164
April	5,256	466	6,222	3,016	697	112
May	1,573	625	3,113	2,917	121	72
June	3,240	1,175	4,058	4,766	210	48
July	2,810	1,348	3,415	561	280	70
August	4,276	3,545	4,575	1,102	249	50
September	3,486	2,534	5,409	870	253	61
Total	33,019	13,589	52,167	28,429	4,821	1,384

Total Production	135,919
Shipments	133,409
Stock-on-hand Sept. 30	2,987
Dollar Value	\$32,121,095.25
Average Unit Selling Price	\$240.77

## Wage-Hour Officials--

(Concluded from Page 1, Column 4)

resolves itself as to whether or not a Federal administrative agency will be permitted to expand its controls into an area where state jurisdiction is warranted and which Congress has said should in fact exist, he asserted.

Technicalities and arbitrary interpretations are relied on to usurp state jurisdiction, it was charged.

Almost half of the states have established their own minimum wage and maximum hour laws. They vary as to requirements, since the laws take into consideration economic circumstances and localized conditions. Federally imposed rules, of necessity, ignore the factors that must be taken into consideration in regulating local businesses. The Wage and Hour Administrator, it was said, is more interested in expanding Federal control than in recognizing the authority of the states.

The furniture group is asking that Congress restate its original intent that the Wages and Hour Law Administrator cannot exercise jurisdiction over purely local retailing operations, and that Congress strengthen the present language of the principle established in the Fair Labor Standards Act that local retailing in all its phases is to remain subject to state jurisdiction.

The administrator, however, contends that a retailer who operates a warehouse is also a wholesaler, and thus comes under his jurisdiction. There has been a growing tendency in the administration of the Fair

Labor Standards Act to rely on technicalities and judicial determinations in border line cases for the purpose of broadening the federal jurisdiction, the House Committee was told.

The administrator has been attempting to bring the essential warehouse phase of the average furniture store operation under scope of the act, but not the retail store, it was disclosed. This constitutes imposition of Federal control by technicalities, indirection, and arbitrary decision, since it is impossible for furniture stores to separate retail warehouse control by Federal regulation from control of the entire operation, the committee was informed.

## 'Lauderall' Coin Meter--

(Concluded from Page 1, Column 5)

side panels. However, Mr. Ash said that arrangements have been made so that authorized Lauderall distributor and dealer servicing organizations can make the installations.

He added that many months of research were necessary in order to produce a meter for Lauderall that would be foolproof. It has been designed, he said, so that the user can stop the machine at any time during its washing cycle in order to add a forgotten article of clothing, or for any similar purpose, just as in normal Lauderall operation.

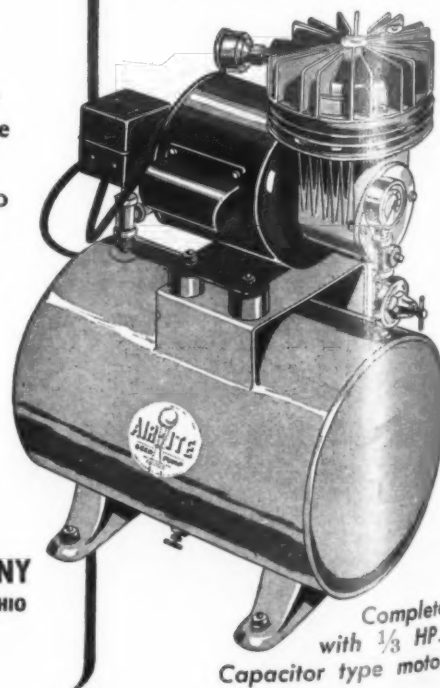
"The meter, being tamper-proof, gives ultimate protection to the coin service operator against theft," Mr. Ash said.

AIR-ITE . . . the newest . . . fastest . . . most economical beer pump on the market has only three moving parts. Built of die-cast aluminum, its DIATON action, piston type compressor with sealed-in bearing requires no lubrication. Cannot contaminate beer! Connected directly with motor . . . there are no V belts or gears to wear.

AIR-ITE is available for services other than beer pump operation. Wholesale distributors . . . retail dealers wanted. Write for details.

Dealers Wanted

RAMSEY-BENNETT COMPANY  
430 HURON ROAD, CLEVELAND 15, OHIO



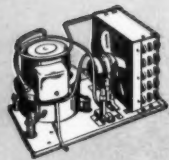
Complete with 1/2 HP. Capacitor type motor

## UNIVERSAL COOLER EFFICIENCY MEANS

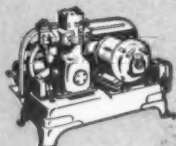
# TRUE ECONOMY

### IN MANY WAYS . . .

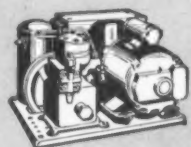
True economy is far more than a matter of price. Quality materials, precision workmanship, and long life of the unit are of vital importance. Thus, true economy is "the best dollar's worth" rather than the lowest price.



HERMETICS  
1/8 H. P.  
TO 1/2 H. P.



REMOTES  
1/4 H. P.  
TO 15 H. P.



SELF  
CONTAINED  
1/5 H. P.  
TO 3/4 H. P.

### . . . OVER MANY YEARS

There's true economy in a refrigerating unit that will win friends and hold them over the years through a long life of dependable, trouble-free service. Universal Cooler units are economical over the years.

### . . . AN EFFICIENT PLANT

True economy in a refrigerating unit is obtainable only when that unit is built in a thoroughly modern plant. Our large, modern facilities stand ready to help you. Why not write us today about your problem? Discover what true economy can mean for you—the Universal Cooler way.

UNIVERSAL COOLER EFFICIENCY MEANS **TRUE ECONOMY**

# UNIVERSAL COOLER

DIVISION INTERNATIONAL DETROLA CORPORATION  
MARION, OHIO • BRANTFORD, ONTARIO



Your advertising budget  
goes

4 times  
farther

with the  
Chicago Tribune's  
Selective Area  
Advertising Plan

here's how



Under the Tribune's Plan you spend only the amount your present budget calls for.



Collectively, your distributors match this amount. Already, your budget is doubled!



Paying small amounts each, your dealers match this total. Now your budget is 4 times its original size!



Everybody's pleased with the results! Through the Tribune's exclusive Selective Area Plan, your dealers are prominently identified in their own neighborhoods. Your sales story hits home where it does the most good. Result: more sales in the Great Chicago Market.

**F**OUR for one is nice return, any way you look at it. But wait'll you see the *results* you can get using the Tribune's Plan! Only the Tribune gives you such effective *selective area* advertising on a co-op basis. Your sales message is directed to the customers in each dealer's own area . . . firmly identifies *his store* as the place to buy *your product*. No wasted readership, no ferreting through hundreds of names to find a nearby dealer! The Tribune's Plan makes it easy for you to get the jump on competitors, to corral more of the rich Chicago Market.

#### EACH DEALER GETS:

- 1 Selective coverage of his local market.
- 2 Prominent display of his name and location.
- 3 The low rate of just 2½¢ a line!

#### YOU GET:

- 1 Better identification of your local outlets.
- 2 Enthusiastic dealer support.
- 3 Advertising that pays off right away!

The Chicago Tribune's Selective Area Advertising Plan enables you to take full advantage of the significant market data revealed in the Tribune's Durable Goods Study . . . one of the most comprehensive analyses ever made among consumers and dealers in the Great Chicago Market. To learn how this Plan can serve your specific needs, contact your nearest Tribune representative as shown below.

#### DOING A JOB FOR RADIOS AND APPLIANCES

Appliance and radio manufacturers using this Plan include: Admiral and Bendix radios, Eureka vacuum cleaners and Bendix washers. They find it means more advertising and faster results from the same advertising budget. Tribune rates per line per 100,000 circulation are among America's lowest.

## Chicago Tribune

*The World's Greatest Newspaper*

September average net paid total circulation:  
Daily, over 1,025,000; Sunday, over 1,500,000

MEMBER: AMERICAN NEWSPAPER ADVERTISING NETWORK, INC., FIRST 3 MARKETS GROUP, AND METROPOLITAN SUNDAY NEWSPAPERS, INC.

A. W. DREIER, CHICAGO TRIBUNE  
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FITZPATRICK & CHAMBERLIN  
155 Montgomery St., San Francisco 4

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Penobscot Building, Detroit 26



## New Angle on the Small Freezer

# Locker Plant Owner Claims Savings In 'Home Freezer Plus Locker Space' Offer

PLYMOUTH, Mich. — A plan whereby their locker customers, and anybody else, can enjoy almost all the conveniences of having a large home freezer but at a saving of almost \$300 over the purchase price of one, has been put into operation by Lidgard Bros., local grocers and locker plant operators here.

For \$201, the customer gets immediate possession of a Crosley "Frostmaster" (a 3.2 cu. ft. home storage cabinet), plus the use for three years of 6 cu. ft. of zero storage space at Lidgard Lockers.

Comparison of cost and maintenance of the plan over three years' time vs. cost and maintenance for the same length of time of the nearest comparably sized home freezer (a 10 cu. ft. box), reveals the following figures, according to Clarence Lidgard's estimates:

### Lidgard's Plan

The Frostmaster freezer, plus locker for 3 years .....\$201.00  
Interest for 3 years ..... 27.00  
Power bill, 3 years ..... 18.00  
Tax on purchase ..... 4.78

Total cost, 3 years .....\$250.78

### Otherwise

Cost of 10-cu. ft. freezer for your home, approx. ....\$400.00  
Interest, 3 years ..... 60.00  
Power bill, 3 years ..... 72.00  
Tax on purchase ..... 12.00

Total cost, 3 years .....\$544.00

That's an estimated difference of \$293.22. Terms available for payment of the initial \$201 are one third down, balance up to 18 months, if terms are requested. Installment payments were not suggested in the plan's announcement, however.

"They only add more record keeping for us," Mr. Lidgard explains, "and they mean an additional charge for the customer to pay."

### Promotion Methods Employed

Announcement of the plan was made through two media. Regular locker and grocery customers were given letter-size multigraphed circulars pointing out the savings possible not only in the plan itself, but also in the purchase of quantity lots of meat and produce at near-wholesale prices.

The comparative tables reproduced above also were included, as well as the salient features of the "Frostmaster"—the economy of its operation, the guarantee carried by its sealed mechanism, and the national standing of its manufacturer. 500 copies of the announcement were printed.

Basic points of the plan were introduced to Plymouth citizens at large in a four-inch item in the women's column of the *Plymouth Mail*, the town's weekly paper (circulation 4,300).

Emphasized in the newspaper item was the fact that only a few lockers were available, and that the offer necessarily was a limited one. It brought in several immediate inquiries, including one order over the phone, sight unseen.

The "while they last" statement was no synthetic come-on. The list of applicants for locker space at the moment stands four feet high. Mr. Lidgard was able to get lockers for the plan only by not immediately re-assigning a few lockers as their leases ran out.

### How the Profit Figures

The cash saving to the customer was estimated at nearly \$300, evident for the most part in reduced initial outlay. But what about the profit realized by the locker plant? What does that amount to?

Profit figures for the locker operator in this case work out almost in reverse—zero as far as the plan itself is concerned, with actual profit coming by way of the sale of quantity lots of merchandise for quick freezing, the processing cost, and by way of increased customer traffic drawn through the grocery department on their way to the locker plant.

For a breakdown of the cash figures involved, the "Frostmaster" is ticketed by the manufacturer to retail in Zone 1 at \$149.95 plus delivery and installation. In Plymouth the retail figure adds up to \$156, ac-

cording to Mr. Lidgard, including delivery and installation. He handles the installation work himself.

Locker storage space, customarily \$3 per cu. ft., for customers taking advantage of the plan is reduced to \$2.50. Adding up the score, \$2.50 x 6 (cu. ft.) x 3 (years) equals \$45, plus \$156 makes the final figure of \$201.

### Booms Other Services

Which, standing alone, would represent an actual loss. Selling the freezer-plus-locker plan, however, is the key to the more profitable operations that follow it. Toward that end Mr. Lidgard keeps one "Frostmaster" on display in the area near the entrance to the plant's frozen food storage room.

With the box standing there in a conspicuous place, he is able to discuss its usefulness with the housewives who have received his circular. Putting on a high pressure campaign hasn't been necessary, he reports.

When a lady's husband is with her, he sometimes asks a couple of questions about the box's construction, and about the guarantee on its operating mechanism. Mr. Lidgard gives him the answers on these—no wood is used anywhere in the cabinet, he explains; the interior shell is welded against moisture infiltration. All exterior hardware is corrosion resistant.

Motor and compressor are welded in a steel casing that protects them and the unit's permanent oil supply from the deteriorating effects of air,

dirt, and moisture. The entire mechanism is guaranteed for five years.

"How often does it need defrosting?" is usually asked by the housewife herself. (Twice a year, according to the manufacturer.)

### Uses Association Helps

Mr. Lidgard uses promotional pieces issued by the National Frozen Food Locker Association to encourage quantity buying for quick freezing by his customers.

The pamphlets emphasize how much the average family's annual food bill can be cut via buying vegetables by the basket, fruit by the bushel, beef by the quarter, and chickens by the crate, at near-wholesale prices. The savings can run as high as 20%, according to the NFFLA.

The major profit stemming from the plan lies of course in the processing of various kinds of produce for zero storage. And, in this case, from the additional customer traffic pulled through the grocery section.

In discussing the processing service offered his customers by the plant, Mr. Lidgard stresses two important

points: First, that home storage cabinets are not engineered to act as quick freezers, and cannot be used as such with any guarantee of satisfactory performance. And, second, that improper wrapping spoils more frozen foods processed at home than any other single cause.

### Problem In Storing Game

That first item is especially important now, in hunting season, with various kinds of game coming into the home for storage in the family freezer. But bulky foods cannot be satisfactorily frozen in a home storage cabinet under any conditions, Mr. Lidgard believes.

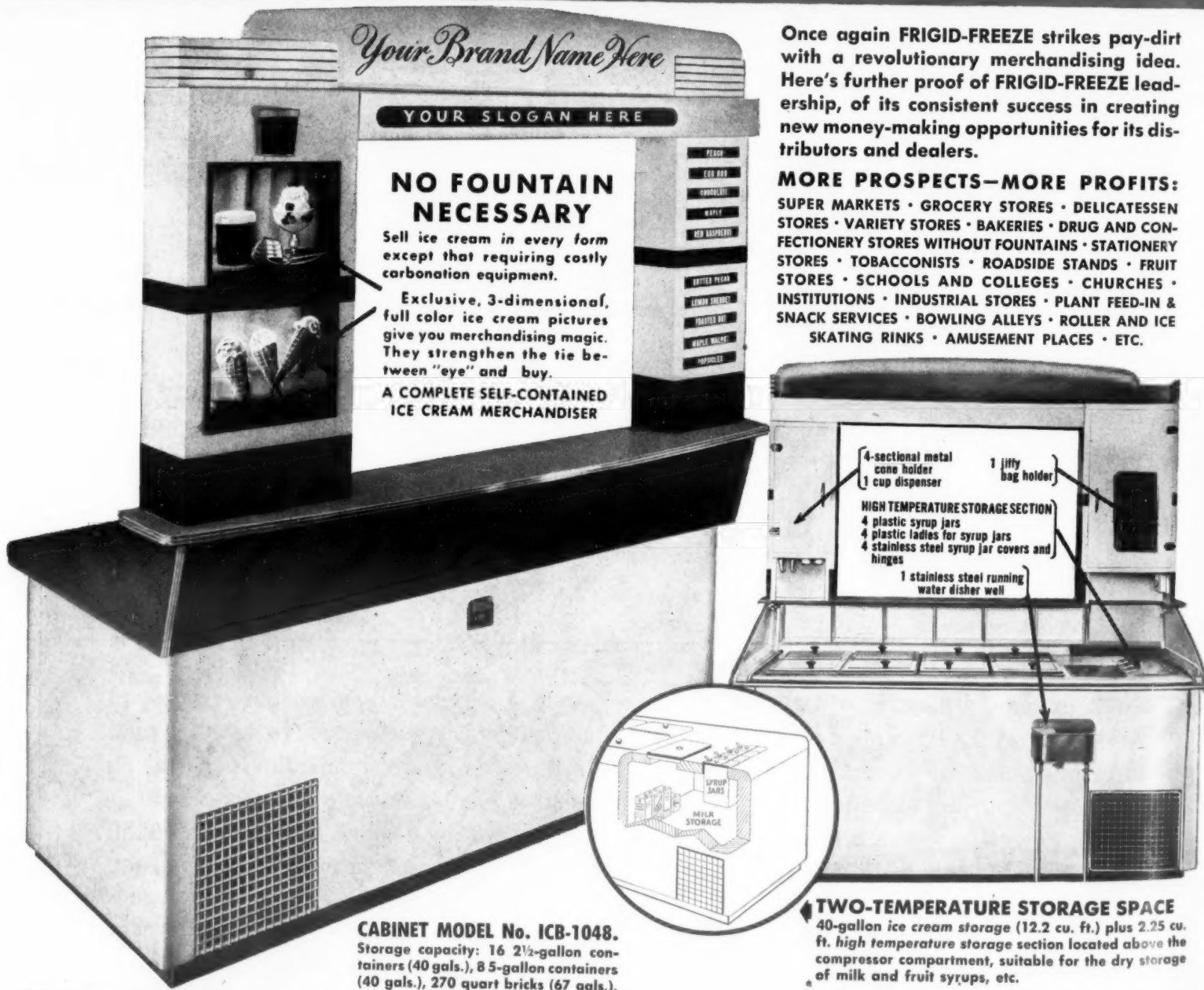
The usual result of this unsuccessful experiment is unfortunate for everybody concerned, it seems to him—the customer's dissatisfaction with the dealer who sold him the box, with the manufacturer, and with the whole food freezing idea.

It isn't a logical complaint, Mr. Lidgard admits. The box isn't falling down on the job it was represented to do. It wasn't sold as a quick freezer.

But that's not the point, he says. (Concluded on next page)

## The New FRIGID-FREEZE

### The Newest Addition to the



Once again FRIGID-FREEZE strikes pay-dirt with a revolutionary merchandising idea. Here's further proof of FRIGID-FREEZE leadership, of its consistent success in creating new money-making opportunities for its distributors and dealers.

**MORE PROSPECTS—MORE PROFITS:**  
SUPER MARKETS • GROCERY STORES • DELICATESSEN STORES • VARIETY STORES • BAKERIES • DRUG AND CONFECTIONERY STORES WITHOUT FOUNTAINS • STATIONERY STORES • TOBACCONISTS • ROADSIDE STANDS • FRUIT STORES • SCHOOLS AND COLLEGES • CHURCHES • INSTITUTIONS • INDUSTRIAL STORES • PLANT FEED-IN & SNACK SERVICES • BOWLING ALLEYS • ROLLER AND ICE SKATING RINKS • AMUSEMENT PLACES • ETC.

### FRIGID-FREEZE 2-WAY SALES PLAN

1. Converts "dry" stops into "wet" stops... Here's the way to sell ice cream "all ways"; for immediate consumption on the premises as sundaes, frappes, milk shakes, malteds and other easily made popular drinks; also cones, cups, sticks and novelties; and for greater consumption at home in brick or bulk packages.

2. Makes new stops out of "no" stops... Ice cream can be sold anywhere, any time. The yen for ice cream, common to grown-ups and young folks alike, is always with us, in all seasons, and at all hours of day and night.

### THE ICE CREAM CENTER FITS ANYWHERE

Cabinet occupies approximately 6' by 2 1/2' floor space. Dimensions with superstructure installed: length 80 5/16", width 41", height 92 3/4". Heavy gauge steel, bonderized for rust-resistance, double baked DuLux white

enamel finish. All joints electrically welded for perfect vapor seal. Easily removable stainless steel top, with sub-top of steel. Rubber lids and snap-on type collars of latest design. Standard insulation. Condensing unit, 1/2 H.P. Tecumseh hermetic unit mounted on slide-out base. Current characteristics: 110 volt, 60 cycle A.C. Refrigerant: Freon 12. Price includes 1-year replacement parts warranty. Additional 4-year warranty on hermetically-sealed unit optional at extra cost of \$5 per unit.

### SUPERSTRUCTURE FEATURES

Heavy gauge steel, bonderized for rust-resistance. 40-watt white fluorescent tube illuminates top header panel, also illuminates counter top and working surface of cabinet. Two 11" by 14" 3-dimensional ice cream pictures, illuminated by 3 30-watt white fluorescent lights. 1 25-watt incandescent bulb keeps cones crisp in cone compartment.

## "JOIN UP NOW FOR BIG 1948



## 'Small Freezer Plus Locker Space' Plan Seen Suitable In Small Industrial City

(Concluded from preceding page)

Once a customer is unsold on the idea, the damage is done. He's apt to be a lost cause from then on, and sometimes so are the friends he befriends about the venison dinner that never materialized.

"We got off on the wrong front when we started calling them 'home freezers,'" he says, "and I think we have a long-term educational project on our hands before frozen foods and home storage cabinets get a chance to show what they can really do in the way of economy."

### His Theory on Freezing

For this reason Mr. Lidgard takes time to explain a little about quick freezing to his customers—why meat to be processed should first be properly aged, then cut not only expertly but according to the customer's preference in meat cuts, then very carefully wrapped, marked,

and frozen under sub-zero temperatures.

The "Frostmaster" itself maintains a temperature of 0° F., entirely adequate for holding frozen foods once they have been processed, he explains, but not designed to do quick freezing. His own plant processes food at temperatures between -32° and -40° F.

Every additional degree below zero is increasingly costly to obtain, he points out. These far-below-zero temperatures are used only because anything less will not do the job satisfactorily!

Completely thorough wrapping is a matter of using adequate wrapping material and of using it effectively, Mr. Lidgard tells his customers. In wrapping the food to be processed, he uses the "drug store" wrap:

With the food placed in the center of the sheet, both edges of the wrapping are brought together over it and folded over together at least

twice, snug and flat against the package. Then, before the sides are folded and stapled, every possible bit of air (which always carries mold spores in it) is pressed out.

As to the kind of wrapping, Mr. Lidgard uses glassine laminated paper, a double-thickness brown paper with a waterproof glossy finish on the inside. The rough finish of its outer surface makes crayon marking easier—for identifying the contents and date of processing of each package.

Effectiveness vs. cost has to be considered here. Mr. Lidgard had samples of several varieties—paper laminated with aluminum foil, with cellophane, and the like. But materials that are good sometimes are also too expensive, he points out.

### Processing Charge Setup

He considers 3-3½ cents a pound a fair processing charge, and bases his own profit estimates upon that figure.

Lidgard Bros. set up their locker plant in October, 1945. It was launched after a careful consideration of the local market. Both men had been in the grocery business here

for several years, with Bob Lidgard handling the grocery buying and selling, and Clarence operating the meat department.

Considering the size of the town and of locker plant competition, you'd think starting a new plant would have looked like an automatic success. The city's population was almost 10,000, and only one locker plant was in operation: Galin & Son, with 270 lockers total capacity.

### Some Facts About the Market

Actually, there were other factors to consider. Plymouth first of all is a conservative town. It is a good business center but not wealthy, and innovations such as door-to-door selling of frozen foods or extensive sales of frozen food storage cabinets, for instance, were and are, Mr. Lidgard believes, still some distance in the future.

The nature of Plymouth's population at the time also was a factor to be considered. Before the war the number of people living here had been somewhat between 5,000 and 6,000. The increase in industrial activity and population numbers be-

gan only after the beginning of the war.

The town, besides having its own small industries that converted their production to war needs, became a residential community for workers at three larger plants outside the city limits.

At Burroughs (which shifted from making office machines to turning out parts for the Norden bomb sight), at Kelsey-Hayes (from automobile wheels to Browning machine guns), and at Willow Run's bomber plant, 15 miles to the southeast.

And so, by 1945, the town's population had reached its peak of nearly 10,000. But most of the increase were former outstate workers whose residence could not be considered permanent. There was nothing to assure local business men that, as soon as the war was over, there wouldn't be a major letdown in population and in business activity.

For these reasons, setting up a new locker plant wasn't guaranteed to be a gold plated investment. But, after looking everything over, the brothers went ahead with it.

They took over the adjacent frontage and built a plant housing 348 lockers. The refrigerating system is a 5-hp. Amcoil unit holding a temperature between 0° and -10° F. in a room measuring 25 ft. x 27 ft. x 11 ft. 5 in. high.

The Lidgards' judgment has been justified since then. A sufficient number of the people who worked here during the war, and of the boys who went off to war, have returned to boost the population figure right back to its wartime peak.

And another locker plant went up this summer.

### Citizens Assume Job of Building Locker Plant

PERU, Neb. — Citizens of this Southeastern Nebraska town decided the community needed a frozen food locker service, and instead of waiting for someone to start such a plant, they are making it a civic enterprise. A committee of seven was formed to campaign for the plant, headed by Peter Holdorg and C. A. Huck.

In short order a goal of 150 subscribers was reached, and plans now are being made for construction of the plant and installation of necessary refrigeration equipment and lockers.

### McNeil Appliances Formed

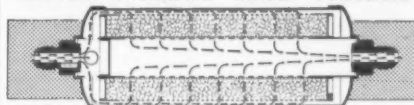
LOS ANGELES — McNeil Appliances, Inc. has been formed in Los Angeles County, with a capital of \$200,000. Directors are: Hugh R. McNeil and Alice McNeil of Monterey Park, Calif.; and Chapman Cottrell of East Los Angeles.

### WANTED Chief Engineer

by large West Coast company. Man must be a commercial refrigeration engineer experienced in directing product development for food refrigeration and display, and a high grade executive. Liberal salary and bonus.

Box 2572, Air Conditioning & Refrigeration News

### REMCO HEAVY-DUTY "CROSS-FLO" DRIER-FILTERS AND FILTERS



UNIQUE "CROSS-FLO" DESIGN eliminates rolling, dusting and packing of drying agent, which eliminates pressure drop, clogging, poor refrigerant control performance and expensive call backs—permits installation in liquid line, suction line or between refrigerant control and evaporator.

Ask Your Wholesaler Or Write

REMCO, INC., ZELIENOPLE, PA.

### NIAGARA

#### "NO-FROST" METHOD WITH SPRAY COOLERS

... gives always full capacity because there is no interruption for defrosting at sub-zero temperatures; protects quality in foods.

NIAGARA BLOWER COMPANY  
30 Years of Service in Air Engineering  
405 Lexington Ave., New York 17, N. Y.

# ICE CREAM CENTER

## Pacemaking Low-Temperature Line!

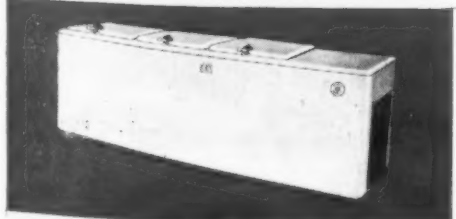
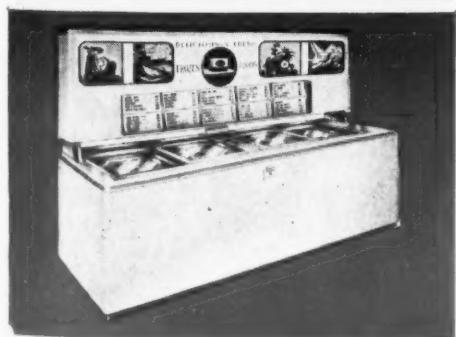
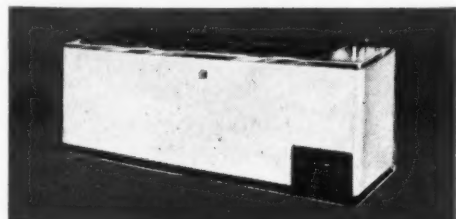
Join up now in the big 1948 FRIGID-FREEZE drive for bigger-than-ever Sales and Profits in the low-temperature field. Tie-in with the line that's "exclusively" low-temperature and that, from the very first, has been "out front" with important contributions to the continued growth of the ice cream and frozen foods industries.

## A FEW PROTECTED TERRITORIES STILL OPEN

Rare opportunity for live-wire Distributors and Dealers

Please write today, indicating the territory desired, whether interested in distributor or dealer connection; also what lines you now represent.

## "EXCLUSIVES" in every 1948 FRIGID-FREEZE cabinet



### ICE CREAM CABINETS: 4-, 6-, 8-, 10-, 12-Hole

These modern, streamlined chest models are solidly built—engineered for years of dependable service and low upkeep. They conform to the most rigid specifications of the Ice Cream Industry. Here's the line you can sell—backed by the pacemaker in low-temperature equipment.

### COMMERCIAL FROZEN FOODS AND ICE CREAM CABINETS

MODEL G-1046—20.2 CU. FT. CAPACITY. Superstructure features full color, 3-Dimensional pictures of life-like depth, an outstanding FRIGID-FREEZE "exclusive." Softly lighted from behind, these brilliant, eye-catching frozen food pictures put new merchandising magic into lagging sales. Cabinet has removable Thermopane sliding doors for peak period self-service and full temperature protection at other times. Packed with features...packed with sales appeal...and priced to sell! Other sizes available.

OPEN-TOP "SPOT-SPECIAL" CABINET-ON-WHEELS. A mobile, self-service cabinet that is rapidly setting new ice cream and frozen food sales records. Holds 200 to 250 1-lb. cartons. Can be wheeled to new locations daily to fit quick-changing merchandising plans. "Exclusive" 3-Dimensional superstructure contains full color frozen food or ice cream picture and space for price cards, flavor strips. Heavy duty, hermetically sealed 1/3 H.P. compressor unit. Concealed wheels. Here's a cabinet that marks a new trend in merchandising ice cream and frozen foods—in supermarkets, chain stores, grocery and drug stores—and other traffic spots.

ALL-ALUMINUM PRE-FABRICATED WALK-INS—for low and high refrigeration temperatures. For hardening and holding ice cream, for freezing and storing of butter and every kind of packaged or bulk frozen foods.

### FARM AND HOME FREEZERS

Available in 6, 12 and 18.5 cubic foot sizes. Equipped with a separate quick-freeze compartment. Zero Sentinel Alarm warns against dangerous temperature rise. FRIGID-FREEZE engineering refinements provide perfect vapor seal and insure maximum food protection.

Pioneers IN LOW TEMPERATURE REFRIGERATION

REFRIGERATION CORPORATION OF AMERICA



Executive Sales Offices: Barber Sta., Perth Amboy, N. J.  
Factories: Perth Amboy and Arlington, N. J.



DRIVE"



## Production of Loudon Reach-Ins Under Way

MINNEAPOLIS — Production is now under way on Loudon reach-in cabinets ranging from 20 to 80 cu. ft. and delivery will be started within two or three weeks, according to an announcement by R. J. Loudon, of Loudon Sales, Inc.

The cabinets will be available with either glass or solid doors and with Dulux finish.

Loudon is also manufacturing ice cube makers and a new biological-medical cabinet in 4½ and 8-cu. ft. capacities.

## Seeger Moves Into Black As Sales Volume Doubles

ST. PAUL — Seeger Refrigerator Co. here has reported a net income of \$1,453,005, or \$1.32 per share for the year ended Aug. 31. This contrasts a \$87,790 loss for last year.

Sales for the year just ended were \$34,891,706, against \$15,160,453 for the previous fiscal year.

## 'Demonstrations Sell Freezers,' So I-H Sends Dealers Detailed Data on Staging Them

CHICAGO—On the premise that "demonstrations sell freezers," the International Harvester Co. here has launched a program designed to foster a minimum of 5,000 home freezing demonstrations in the next year, company officials have announced.

Each of the company's refrigeration dealers is being sent a transcription of a successful test demonstration conducted by Miss Loris Knoll, home economist on the firm's refrigeration sales staff and a sales bulletin outlining exactly how the demonstration should be conducted.

These materials are intended to act as a guide to the dealer in setting up and conducting his own local demonstration, the company declared.

The demonstration plan, called "Frozen Food Facts," calls for the blanching, cooling, packaging, and labelling of vegetables; preparation, discoloration-control and demonstrating various packs for fruits; prepar-

ing and wrapping meats and poultry, and cooking and serving frozen foods.

Freezing of complete meals and other foods and the time saving, work saving advantages of freezing at home are emphasized.

The sales bulletin outlines every preliminary preparation and every step of the demonstration for the dealer. It gives him a list of groceries to purchase, provides models for formal invitations to send out, tells him what kind of a home economist to choose, and details the advance preparation she must make.

The bulletin also calls for a wholesale refrigeration salesman to introduce the home economist and to answer questions of the freezers used in the demonstration.

"Emphasis throughout is far more on the convenience and desirability of home freezing than on making a direct sale," company officials declared.

## Inventor Explains His Compressor to Producers

Active in the organization of the Clercold Corp., formed to produce a new rotary compressor, are Leonard Clerc (left), who is explaining some details to Vincent Pope, treasurer, as John Ray (standing at left), secretary, and Russell Nida, vice president, look on.



## Clercold Corp. Formed To Manufacture New Clerc Rotary Compressor

DEARBORN, Mich.—Formation of the Clercold Corp. to manufacture the newly developed Clerc rotary compressor has been announced here.

Designed by Leonard F. Clerc of Detroit, the compressor is claimed to be of high capacity due to its non-frictional controlled-thrust vane open type design. It will be produced in various sizes for standard and low temperature applications in both refrigeration and air conditioning, the company states.

Among the chief features claimed for this design are its small outside dimensions compared to its B.t.u. capacity and instantaneous direct-acting suction and compression, making it particularly applicable for low vacuum and high pressure work, the company says.

Officers of the Clercold Corp. include Joseph Stoia, president; Earl Gould and Russell Nida, vice presidents; John Ray, secretary; and Vincent Pope, treasurer.

Executive sales offices have been established at 400 W. 119th St., New York City.

## Deepfreeze Officials Off To Show '48 Models, Tell of Unique Sales Plan

NORTH CHICAGO—Executives of the Deepfreeze Division, Motor Products Corp left Nov. 10 on a 5,000-mile trip to conduct a series of regional sales meetings with their distributors to introduce new models, and present a new selective selling plan for retailers.

Meetings will be held at the Sheraton hotel in Chicago, on Nov. 11, at the Hotel Pennsylvania in New York City on Nov. 14, at the Georgian Terrace hotel, Atlanta, on Nov. 18, and the Palace hotel, San Francisco, Nov. 25.

Among those participating in the meetings will be: G. H. Smith, vice president and general manager; F. F. Duggan, general sales manager; R. V. Newbell, advertising and sales promotion manager; S. J. Seibert, product service manager; Miss Geraldine Corman, home economics director; Howard Bede, account executive, Leo Burnett Advertising Agency.

At these meetings the announcement of a unique national selling plan will be introduced to Deepfreeze distributors.



That is the question we are continually asking ourselves . . . and in finding the answers, we have built the improvements into FLEETWOOD DISPLAY CASES which make them the outstanding silent food salesmen on the equipment market today.

Ask today about the **NEW** and **BETTER** Features of the

# Fleetwood

All Porcelain . . .  
Double Duty Display Cases  
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Dairy Wall Cases

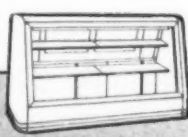
Some Choice Dealer Territories Still Available



WILKES-BARRE • PENNA



DAIRY WALL CASES



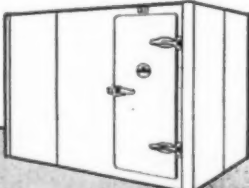
FULL VISION CASE



DELICATESSEN CASE

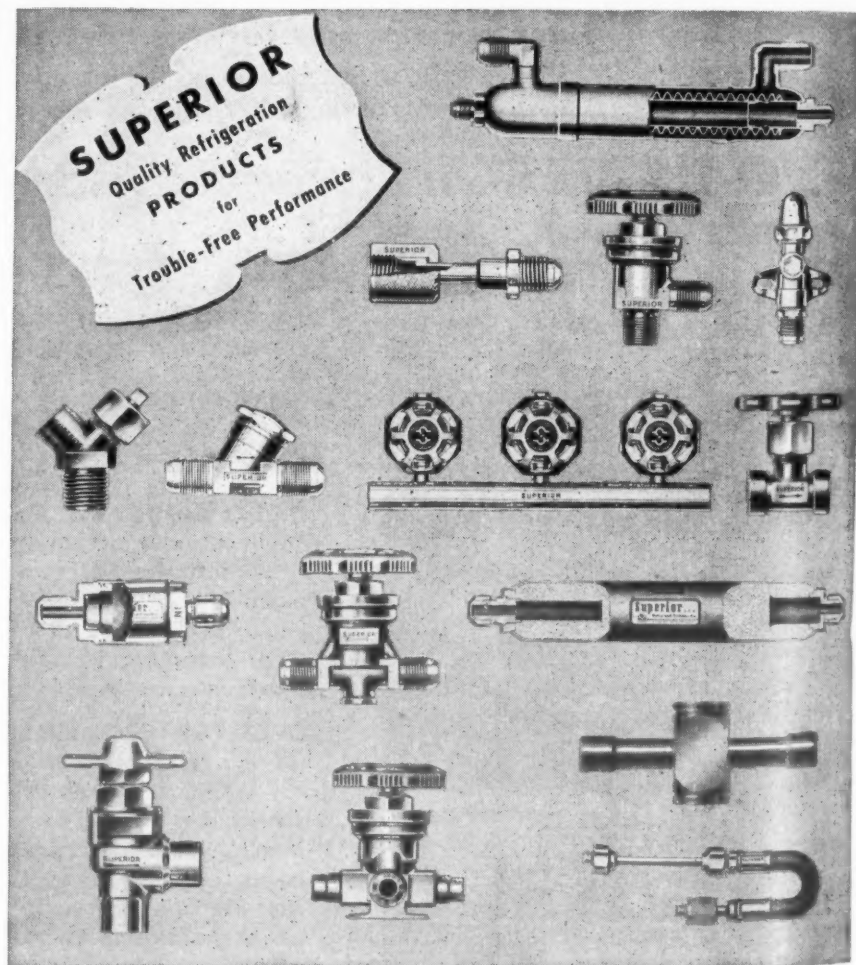


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CUSTOM-BUILT EQUIPMENT THAT SETS THE NATION'S STANDARDS



## Designed and Engineered for Maximum Performance . . .

In all refrigeration and air-conditioning systems, the SUPERIOR line includes the famous Diaphragm Packless Line valves; globe, charging, purging or drain valves; hand expansion valves; pressure cup (wing cap) globe valves; packed line, angle, compressor and cylinder valves; check valves; liquid indicators and sight glasses; quick couplers; gauge manifolds; economizers (heat-exchangers) and manifolds; dehydrators and filters; rapid-chargers (refrigerant transfer systems); charging hose; and SAE flare fittings.

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# Superior Valve and Fittings Co.

1309 WEST LIBERTY AVE. PITTSBURGH 26, PENNA.  
OFFICES IN PRINCIPAL CITIES STOCKS CHICAGO (6) LOS ANGELES (15) JOBBERS EVERYWHERE



## Food Expert Reports Findings of Studies on Pre-Treatment, Wrapping of Frozen Meats

BERKELEY, Calif.—Recent studies of the pre-treatment and wrapping of frozen pack meats to determine their effects on storage qualities have yielded the following conclusions, reports W. V. Creuss, professor of food technology and biochemist in the University of California Agricultural Experiment Station:

1. Meats properly aged—not over-aged—and well wrapped should keep satisfactorily at a constant 0° F. for the following periods:

- Fresh beef, 12 to 14 months.
- Fresh pork, 6 to 8 months.
- Lamb and poultry, 8 to 10 months.
- Seasoned sausage, 2 to 3 months.
- Other ground meats—hamburger and lamburger, 4 to 6 months.

2. Of the pre-freezing dips compared in these experiments, the dilute (0.5 to 1%) citric acid dip appears to have the greatest practical value for use in locker plants.

3. Aluminum foil proved superior to regular locker paper and to the cellophane laminated locker paper when the meat was wrapped tightly so that most air pockets were excluded.

4. In general, rubber latex bags appeared to be the best of the bags used. Several plastic lined paper bags were superior to wrapping paper.

5. When hamburger, lamburger, and roast beef were filled tightly into tin cans, with practically no air space, and the can sealed hermetically—air tight—after filling, the meats kept extremely well. Similar results were obtained with Mason fruit jars.

Prof. Creuss declared that "a satisfactory wrapping material must be non-toxic and should:

- Be odorless and tasteless,
- Possess high wet strength so when it is wet with meat juices it will not soften and break easily,
- Not become brittle at 0° F.,
- Be applied easily,
- Protect as nearly completely as possible against moisture vapor loss,
- Not be prohibitive in cost,
- Not adhere to the meat,
- Preferably be heat sealable,
- Be grease proof,
- Be of good strength before freezing, and
- Be easily marked for identification."

Elaborating on the advantages of aluminum foil wrapping, he said that aluminum foil fits the contour of the meat and remains in position much better than does locker paper.

"There was considerable drying and some staling of odor and flavor when cellophane was the wrapper," he declared. There was even more when locker paper was used, he indicated.

However, "meats and chickens wrapped in aluminum foil were still in excellent condition with practically no drying or staling after being stored for one year at 0° F.," he asserted.

He rated the three types of wrapping on relative quality as follows:

Aluminum foil	100
Cellophane	75
Locker Paper	50

In testing the bags, hamburger, roast beef, and lamb chops were stored in them from 11 to 17 months.

In testing the cans, it was noted that the meat retained its fresh odor and flavor for 17 months. Several

cans of hamburger opened after more than 24 months storage were still in very good condition, Prof. Creuss stated.

With the Mason jars, it was necessary to fill with ground meat or meat pieces and water (to prevent air pockets) only to the shoulder of the jar. This left sufficient room for expansion upon freezing, he said.

He expressed the belief that rectangular cans or jars would eliminate the locker operator's complaint that they waste space.

In the pre-treatment experiments, Prof. Creuss found that the dilute citric acid solution aided materially

in retarding the staling and rancidification of wrapped meats. A 0.5% solution was found to be sufficient.

Lamb chops, beef steaks, and pork chops were given a 30-minute cold smoke treatment. Results: "There was practically no drying of the meats. The surface became rather gray in color and there was no cooking effect."

These meats, wrapped in plastic surfaced paper or packed in plastic bags, were stored for 17 months at 0° F. After that time they were found to be "very pleasing in aroma and flavor after frying or boiling."

Untreated meats used as a check had long since become rancid or stale.

"Chicken similarly treated is very pleasing in aroma and flavor, but the experimental packing has not been stored long enough to ascertain the effects of kipping on keeping quality," he said.

## Guterman New District Agent For G-E Commercial Lines

PHILADELPHIA—Fred H. Guterman has been named district representative for General Electric commercial refrigeration in the Philadelphia area, C. S. Morash, manager of the G-E Atlantic district, has announced.

Guterman, whose office will be at 1405 Locust St., Philadelphia, will specialize in sales to manufacturers of refrigeration equipment.

Completing three years of Air Forces service as an ordnance major in 1945, Guterman joined the G-E Air Conditioning Department as a test engineer. He organized a training school for distributors in 1947, and acted as sales coordinator for refrigeration divisions.

## York Names K&S Cooling Buffalo Area Distributor

BUFFALO — Announcement was made recently by the K&S Cooling Corp., 11 Swan St. here of its appointment as exclusive distributors for York Corp. products in this territory.

K&S Cooling is a new firm organized by Harold B. Stratton and William P. King. Mr. Stratton has been identified with the distribution of York products for a number of years, having left the Albany distributor to take over the Buffalo territory. Mr. King formerly was associated with the Chevrolet division of General Motors.

The new firm will specialize in sales and service for all York products.

**YOU'LL SEE WEBER ROLL-A-DOORS WHEREVER YOU GO!**

**KEEP YOUR EYE ON THE WEBER WORLD!**

There's no leveling off in sales of Weber Roll-A-Doors . . . because new outlets and new applications have been developed for this profit-making Line of Frozen Food and Ice Cream Cabinets. Refrigeration Service Organizations are finding lucrative Weber Roll-A-Door Servicing Contracts everywhere . . . servicing made easy by Weber's quality construction and advanced engineering. *The famous Roll-A-Door Principle, originated and developed by Weber . . . modern, eye-appealing design . . . greater accessibility . . . and durability, make Roll-A-Door Cabinets the most profitable display cases in the world. That's why you'll see Weber Roll-A-Door Cabinets wherever you go. So keep your eye on the Weber World!*

INVESTIGATE AND YOU'LL INVEST IN WEBER



**BAKERIES . . .** the nation-wide trend toward refrigerated pastry is gaining momentum with Roll-A-Door Cabinets building high-volume self-service sales of pies, cakes and other pastries.

**THEATRE LOBBIES . . .** the popular theatre lobby "Snack-Bar" becomes highly profitable with Roll-A-Door Cabinets stealing the spotlight . . . creating "impulse sales" of specialty ice cream.

**DRUG STORES . . .** Glass-doored Roll-A-Doors, providing superior visual display, are building a large volume, "take-home" self-service trade for ice cream in independent and chain drug stores all over the country.



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A Hotel Planned and Designed for Your Every Comfort . . . assuring you absolute Rest and Relaxation . . . amid an Atmosphere of Refinement . . . Beautifully Furnished Rooms . . . Ocean Front Verandas . . . Roof-Top Solarium . . . Salt Water Baths . . . Cuisine Unsurpassed. Garage on Premises . . .

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Los Angeles • El Paso • Sales Offices In All Principal Cities  
Warehouse Stocks in Key Metropolitan Areas





Table 1—Refrigerator Prices  
(In Terms of Commodities and Wages)

	August, 1941		August, 1947	
	Price or Amount In Dollars	Required to Purchase a Refrigerator	Price or Amount In Dollars	Required to Purchase a Refrigerator
Refrigerators	\$160.00	..	\$246.00	..
Corn (1)				
Wholesale, weighted average, 5 markets, all grades, per bushel	74¢	216	\$2.30	107
Wheat (2)				
Wholesale, weighted average, 6 markets, all grades, per bushel	\$1.05	152	\$2.47	100
Cotton (3)				
Middling, 15/16", average 10 markets, per pound	16.1¢	994	34.3¢	717
Lumber (4)				
Douglas fir, softwood, wholesale, dimension No. 1, common 2x4x16, per M board feet	\$25.97	6.2	\$64.19	3.8
Beef (5)				
Wholesale, fresh native steers, at Chicago, per lb.	17.6¢	909	46.9¢	525
Factory Wages (6)				
Average weekly wages in all manufacturing plants	\$31.66	5.05	\$49.29	4.99

SOURCES:  
(1) Survey of Current Business, 1942 Supplement, page 118.  
(2) Survey of Current Business, Weekly Supplement, Sept. 26, 1947, page 2.  
(3) Survey of Current Business, 1942 Supplement, page 120.  
(4) Survey of Current Business, Weekly Supplement, Sept. 26, 1947, page 2.  
(5) Survey of Current Business, 1942 Supplement, page 165.  
(6) Survey of Current Business, Weekly Supplement, Sept. 26, 1947, page 2.  
(7) Survey of Current Business, 1942 Supplement, page 133.  
(8) Survey of Current Business, Weekly Supplement, Sept. 26, 1947, page 2.  
(9) Survey of Current Business, 1942 Supplement, page 123.  
(10) Survey of Current Business, Weekly Supplement, Sept. 26, 1947, page 2.  
(11) Survey of Current Business, 1942 Supplement, page 53.  
(12) Survey of Current Business, Weekly Supplement, Oct. 3, 1947, page 3.

## Consumer Today Spends Smaller Percentage Of Income On Appliances Than He Did In '41

ATLANTA — In terms of basic values, electrical appliances have actually declined in price since 1941, W. E. Saylor, manager of the Kelvinator utility division, told the general sales conference of the Southeastern Electric Exchange here recently.

"In other words," he explained, "the farmer must trade fewer of his bushels of wheat or his pounds of cotton for an electric refrigerator than back in 1941, and the factory worker needs work less time at his current pay scale to buy a refrigerator, even at a currently higher dollar price."

To prove his point, he exhibited a chart (Table 1) that compared refrigerator prices in August, 1941, with those in August, 1947, in terms of commodities and wages.

"In preparing this chart," Mr. Saylor disclosed, "we established an average refrigerator price of \$160 for August, 1941. Using the same formula, we arrived at a comparable price of \$246 for August, 1947."

"In August, 1941, corn, using the wholesale weighted average of five markets, all grades, was 74 cents per bushel, as shown in column 1. And at that time, it would have required 216 bushels of corn to purchase our average refrigerator priced at \$160."

"In August of 1947, with corn at \$2.30 per bushel, figured on the same basis as 1941, that same average refrigerator now costing \$246 in money,

could have been bought for 107 bushels of corn."

Other commodities on the chart are figured in the same manner, he indicated.

This chart was one in a series used by Mr. Saylor to show that appliances are not overpriced today and that the buying public does not consider them so.

"It has always been true, I believe, in this country under our particular system of free enterprise, that people have continued to buy merchandise for which they have a need just so long as they were convinced that the price was fair for the quality offered," he asserted.

"And the reverse of that also is true—namely, that people stop buying a product when the price rises to a point where it outweighs its value to them."

"Applying this thinking to today's situation in the appliance field, I think we would be justified in concluding that the buying public feels that appliances generally are not over-priced—taking the country as a whole."

"In fact, since the buying public continues to beset dealers for such products, it would seem logical to conclude that prices as they exist today must look very favorable to people generally."

The price of the average refrigerator has increased 54.3% in the past seven years, he declared. "When

you compare the advances of factory wages, and farm income, and the advance of commodities as shown in the chart below, the 54.3% increase on electric refrigerators seems modest, indeed."

Table 2—Price Increases

Percentage Increases from August 1940 to August 1947	
Refrigerators (1)	54.3
Automobiles (2)	57.3
All Manufacturing	
Factory Wages (3)	95.8
Durable Goods	
Factory Wages (3)	86.3
Farm Income (4)	157.9
Corn (5)	218.4
Wheat (6)	238.3
Cotton (7)	246.5
Lumber (8)	180.2
Beef (9)	156.3

#### SOURCES:

(1) Typical average electrical refrigerator.  
(2) Bureau of Labor Statistics, Passenger Car Index, adjusted.  
(3) Bureau of Labor Statistics, as reported in the Survey of Current Business.  
(4) Sales Management Survey. (annual basis).

To show what has happened to the cost of living generally, Mr. Saylor brought forth a chart (Table 3) illustrating the cost of living increase between 1941 and 1947.

Table 3—Cost of Living Increase 1941-1947

	January, 1941		June, 1947		1941-1947 Percentage Increase
	Amount	Weighting Factor (1)	Amount	Weighting Factor (2)	
Food .....	617.40	34.3%	1,176.15	41.8%	90.5%
Clothing .....	198.00	11.0%	367.69	13.1%	85.7%
Rent .....	352.80	19.6%	385.26	13.7%	9.2%
Fuel/Electricity .....	120.60	6.7%	141.95	5.0%	17.7%*
Home Furnishings .....	79.20	4.4%	144.62	5.1%	82.6%
Miscellaneous .....	432.00	24.0%	600.91	21.3%	39.1%
Totals .....	\$1,800.00	100.0%	\$2,816.58	100.0%	56.5%

\*The Bureau of Labor Statistics uses a single figure to indicate the index of fuel and electricity in making up the Cost of Living. In June, 1947, there was a net increase of 17.7% for both items. However, the segregation of this index figure shows the following:

Gas and Electricity decreased 8.3%  
Other fuels and ice increased 43.0%

SOURCE: Survey of Current Business, September, 1947, Page S-4.

(1) The relative weighting given to the various factors in the cost of living is in accordance with that used by the Bureau of Labor Statistics, Department of Labor, in determining the Consumers' Price Index in January, 1941, as reported in the Handbook of Economic Statistics, 1947 Edition, Page 114.

(2) The percentages of increase for the various factors are in accordance with the Consumers' Price Index of the Bureau of Labor Statistics for June, 1947, cited in the Survey of Current Business, September, 1947, Page S-4.

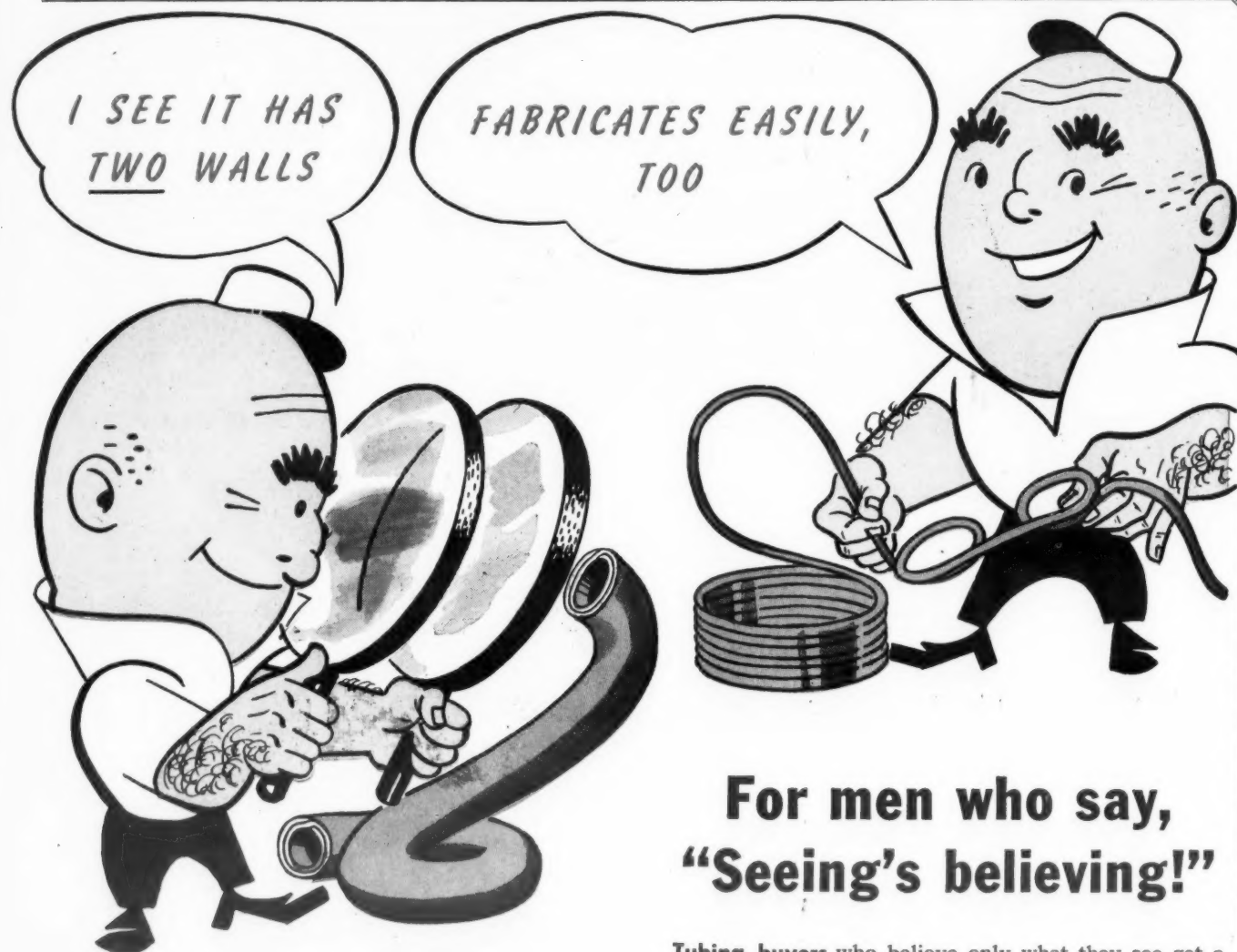
"In order to make some understandable comparisons," he explained, "we have taken as our base, a family having a total income of \$1800 in 1941. This is the figure at the bottom of the first column of figures on the chart."

"To establish how this income was spent, we used a weighting factor in the cost of living, set up by the Bureau of Labor Statistics, Depart-

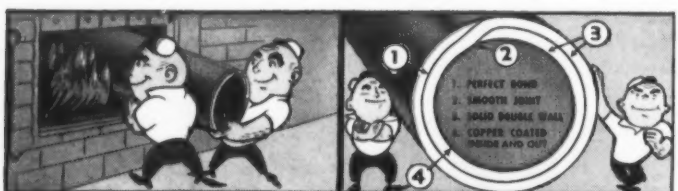
ment of Labor, in determining the consumer's price index in January, 1941. This is the percentage figure shown in the second column.

"In order to establish what this same family would have to spend and how it would be spent in 1947, we used a percentage of increase for the various factors in the total budget, in accordance with the con-

(Continued on next page)



1 Bundy Steel Tubing is made by a process entirely different from that used in making other tubing. A single strip of copper-coated S.A.E. 1010 steel is continuously rolled twice laterally...



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3 ... copper coating fuses and alloys with the double steel walls. After brazing and cooling, it becomes a solid double wall steel tube, copper brazed throughout 360° of wall contact ...

4 ... copper coated inside and out, free from scale, closely held to dimensions. Hard or annealed in standard sizes up to 3/4" O.D. Special sizes cold drawn. Also in Monel and nickel.

Tubing buyers who believe only what they see get a hearty welcome at Bundy.

When they look at Bundy Tubing, we know what they are going to learn—and we know they're going to like it.

They're going to see solid, double wall tubing of great strength—yet, it fabricates with ease.

A further look will show them how Bundy Tubing can give greater dependability to their product at economical prices.

Look at these important advantages made possible through the patented Bundy process:

- solid, double wall
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- FROSTED FOOD CASES
- FREEZERS
- DISPLAY CASES
- ICE CREAM CABINETS

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## Higher Individual Earnings Mean Large Reservoir of Untapped Purchasing Power

(Continued from preceding page)

sumer's price index of the Bureau of Labor Statistics for June, 1947.

"This is the figure shown in column 5 on the chart. Multiplying column 1 by column 5, and then adding the result to column 1, we arrive at what the same living standard would cost us in 1947. This is the figure shown in column 3.

"And, of course, that now gives us a new weighting factor, percentage wise, which is shown in column 4.

"I think the point to be made from this chart is simply that general living costs for the average family are up more than 50%. At the same time, our National Income has risen from \$103,800,000,000 in 1941 to approximately \$200,000,000,000 in 1947, or almost 100% increase. That means that even at present increased prices, people still have more money with which to purchase."

In Table 4, he compared 1941 figures on how much was spent on major appliances in comparison to national income with 1946, because the latter were the latest available on the total value of the appliances considered. Those appliances include refrigerators, ranges, water heaters, home freezers, electric ironers, electric washers, and vacuum cleaners.

Table 4—Value of Electrical Merchandise

	1941 Units	1946 Units
Total Value at Retail	919,537,000	1,008,296,000
National Income	103,800,000,000	178,200,000,000
% of National Income	.885	.556

SOURCE:  
National Income statistics from the Survey of Current Business.  
National Income Supplement (Department of Commerce), July, 1947, Page 19.

"The point I want to make is two-fold," Mr. Saylor said. "First, in spite of increased appliance prices, the percentage of total national income being spent for appliances is smaller today than back in 1941.

"And, second, regardless of the price structure in our industry, by no stretch of the imagination, could it affect the total over-all national economy—it's just simply too small a percentage of the total national income."

Comparative production figures on the appliances mentioned were also presented by Mr. Saylor. They are given in Table 5.

"We have used 1941 as the year for comparison because for most items shown here that year represents an all-time high in production and sale of these products.

"I cover these figures with you, not to brag particularly about the job manufacturers have done in the face of many obstacles—although I do think it has been commendable—but to make the point that in the face of production figures like these, had there been any question in the

Table 5—Production of Electrical Merchandise

	1941 Units	1946 Units	1947 Units
Refrigerators	3,500,000	2,100,000	3,100,000
Ranges	728,000	544,000	1,000,000
Water Heaters	205,000	488,000	950,000
Home Freezers	....	87,000	300,000
Electric Ironers	260,000	175,000	500,000
Electric Washers	1,892,000	2,000,000	3,000,000
Vacuum Cleaners	1,670,000	2,169,000	3,000,000
Total	8,450,000	7,563,000	11,850,000

SOURCES:  
Production of units for 1947 is an estimate based upon best industry figures available for 8 months of 1947.

public mind as to the fairness of the prices charged for these products,

we would not continue to be in a seller's market on many of these products in most parts of the country today."

Turning to the southeastern states of particular interest to his audience, he pointed up the favorable conditions there for expansion of the appliance market. (See Table 6.)

Taking cognizance that these states are predominantly rural, he noted that "prewar, approximately one-ninth of the total farm income came into the southeast. In 1946 it was about one-seventh.

"In light of these facts," he declared, "it would seem that electrical appliances today represent a greater value, comparatively, than they were prewar. The net effect upon your buying public, therefore, should be to increase purchases of such appliances.

"If we accept this as true," he said, "why then the talk of 'back up' of certain appliance lines? What is actually going on?"

"I think you may be interested in some preliminary results of a survey being conducted among dealers at the present time by Kelvinator's marketing and organization division.

"It shows that currently, on refrigerators, 30% of the dealers indicate no price resistance developing yet. Seventeen per cent say there is a re-

Table 6—Farm Income

(Cash Return from Marketing of Crops and Livestock)

	(In Thousands)		In-
	1940	1946	crease
United States			
Total	\$9,119,903	\$23,525,041	157.9%
Selected			
Southeastern			
States			
Alabama	115,463	293,133	153.9%
Florida	113,486	423,728	273.4%
Georgia	168,048	419,583	249.7%
Mississippi	147,221	333,528	126.5%
Louisiana	112,114	272,241	142.8%
N. Carolina	221,768	712,604	221.3%
S. Carolina	116,017	259,925	124.0%
Tennessee	141,490	367,721	159.9%
Virginia	125,638	383,722	205.4%
	\$1,058,749	\$3,466,185	174.8%

SOURCES:  
Sales Management, April 10, 1941, Page 77.  
Sales Management, May 10, 1947, Page 144.

sistance on low-price models, and 50% indicate price resistance on the higher priced models.

"In other words, approximately 50% of the dealers have experienced no resistance so far, based on too high prices.

"What is the outlook on ahead? Appliance companies generally are looking forward to continued good business—better than anything yet seen. Most companies are tooled up to produce a greater volume of products, and need only a freer flow of materials to turn them out.

"However, somewhere along the line—how far away still remains an arguable question—the knocking down of this backlog of ready customers will bring the industry to the point of returning once again to the successful practices upon which it was built.

"When this time comes, there seems every reason to believe that good business will continue. This industry has always been based upon volume production, fair prices for good value, backed by intensive advertising, promotion, and selling effort.

"That is a formula we know will work, because it has been proved over many years.

"We know that the only answer to any sales problem in this country is to produce more and better merchandise at a fair price, and, in a competitive market, push for sales on the basis of value to the consumer.

"With such a program there can only be one answer—a continued large volume of sales."

## 3 KEY FEATURES...



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**2** FLUSH-WELD PRECISION SKEWED ROTOR is the heart of every Redmond A.C. Micromotor. Here's maximum electrical conductivity and quiet operation. In this micro-balanced rotor there are no open slots to collect chips, dirt and dust.

**3** AIR-STREAM ENCLOSED COOLING makes possible totally enclosed high torque shaded pole Micromotor construction with much smaller overall dimensions than would be required with a "flat" surface shaded pole motor.

If you need twenty-fifth horsepower 4-pole shaded pole motors for A.C. operation, check these fine Type "T" Micromotors. Other Redmond Micromotors are made in sizes from 1/150th up to 1/15th horsepower.

★ Expanded facilities. Prompt deliveries. Service before and after the sale.

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MAIN OFFICES: Owosso, Michigan  
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Redmond facilities now total more than 3 acres floor area and 3000 employees.

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PAR condensing units. We carry a stock to fill large and small orders. Try AUTOMATIC SERVICE and be convinced.

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## "A Leading Profit-Maker for Year-around Business"

### Demonstrator's Value to Sale Cited by Mrs. Kiene

NEW YORK CITY — Discussing "Demonstration Techniques for the Electric Refrigerator," at Hunter College, Mrs. Julia Kiene, Manager, Home Economics Institute, Westinghouse Electric Corp., emphasized the demonstrator's selling role.

"It may be to sell an appliance, food or an idea, but the only justification for taking the time of an audience or the expense involved in putting on a demonstration, is to sell.

"In order to sell it is necessary to gain the interest of the audience at once and maintain it throughout the demonstration, therefore it must be fast moving; it must be done easily and without effort and it must not be too complicated," said Mrs. Kiene, continuing, "An audience cannot remember too many things, so a good demonstrator should have one major point that is to be stressed and several secondary points."

"Never try to put anything over on the audience," cautioned Mrs. Kiene, "everything should be done in full view to convince them of your honesty and sincerity."

"Good timing is the finest form of dramatics," said Mrs. Kiene, suggesting that prospective demonstrators listen to Jack Benny's programs, which are dull reading, but funny on the air, because of his perfect timing.

Touching on the ticklish question of handling "hecklers," Mrs. Kiene advised answering their questions as earnestly as possible, and if the disturbance continues, asking them to remain afterwards for further discussion.

### Salesmen Check Prospects

## Spare-Time 'Courtesy Calls' Keep Deadwood Off Dealer's Waiting List

AUGUSTA, Ga.—Having one appliance salesman spend half his day making courtesy calls on waiting list prospects has paid dividends to the J. B. White Co. department store here, according to B. E. Mann, appliance department buyer.

This salesman "usually has nothing to sell, but drops in on the housewife, shakes hands, answers any questions about major appliances which she may have, and reassures her that the store is keeping her in mind," Mr. Mann explained.

"We have found that this is simple wisdom," he added. "Often a friendly call by a courteous salesman in this way will keep the customer from buying somewhere else after she has already registered her name with us."

"We have already seen this to be true in the fact that our priority-registration list contains little or no deadwood."

White's appliance department is staffed by three full time floor salesmen at present. Outside salesmen, on a draw and commission basis, will be hired as soon as deliveries increase, Mr. Mann said.

The appliance salesmen are backed up by a complete service department

located in the store's warehouse. One full-time mechanic and two helpers who are in training are capable of handling all refrigerator, range, washing machine, and small appliance overhaul, up to installing sealed units, he declared.

With trade-ins uppermost in mind, the repair shop has been equipped with complete machinery, a spacious paint shop, and a stock of new refrigerator hardware.

Every box accepted will be given a 24-hour test, be completely appearance reconditioned, and then will be advertised for sale in a small shop which is part of the warehouse, according to Mr. Mann.

"The faster we are able to accept trade-ins, the better position we will have in the forthcoming competitive selling field," Mr. Mann asserted.

"Of course we don't like to handle them," he said, "and our salesmen are loath to make trade-in allowances."

"However, we are teaching them to estimate correctly, to guard against accepting too much junk."

"As far as possible we are going to try to show a small profit on rebuilt refrigerators, but expect that we will be fortunate to break even."

## Los Angeles Store Uses 'Scoreboard' on Immediate Delivery Items To Spur Sales

LOS ANGELES—A downtown Los Angeles furniture store has stimulated interest among prospective major appliance buyers by means of a clever sign which gives the sidewalk passerby an idea of whether he can get immediate delivery on wanted appliances or not.

The sign, 12 x 15 ft., in the rear of the main furniture window, offers refrigerators for immediate delivery. Across the top in large letters is the message "Immediate Delivery." The number of refrigerators actually available for delivery on that day is posted on the sign, by means of small cards, numbered from 1 to whatever volume of boxes is on hand.

Every time a refrigerator is sold in the appliance department, the salesman comes down, pops into the window, and removes one card, which reduces the total by one.

In this way, many housewives who had thought that refrigerator delivery was still many months away, have been able to jump into the store and make a quick purchase, according to the management. However, the sign is highly exemplary of price resistance.

Because the sign has been used to introduce a refrigerator of a not-too-well-known brand, at a price of more than \$300, the numbers on the sign showed that less than 20 had been sold in a single week—almost

half of the refrigerator stock still being on hand the following week.

"If it were a nationally-advertised, well-accepted refrigerator, we would probably never get an opportunity to use the reducing-number sign," the appliance manager indicated. "However, we have found that the idea is good advertising, and we have actually made sales to ranchers, farmers, and wealthy suburbanites who need a capacious-size box so badly that price is no object."

### Non-Electric Water Heater Shipments Rose In August

WASHINGTON, D. C.—Shipments of non-electric water heaters during August rose slightly above July while shipments of electric heaters dropped 4%, the U. S. Bureau of Census has reported.

August shipments of non-electric water heaters numbered 218,000 valued at \$9,500,000. Electric water heater shipments totaled 64,000 valued at \$4,100,000, it said.

In the non-electric category, production jumped from 199,000 in July to 215,000 in August. At the same time, inventories dropped from 88,000 units to 85,000. Unfilled orders shrunk 67,000 units to 747,000 at the end of August, it declared.

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Dealers everywhere agree—there's never been anything like it before! Wherever the new Fresh'nd-Aire Humidifier is shown—it attracts customers and their dollars in a manner that means business—*instantly*.

No wonder this new postwar appliance sells so easily! It rids homes and offices of dry parched air—often a contributing cause of colds, respiratory illness and costly damage to furniture, books, walls and woodwork. Thousands now know that winter heating without humidification means trouble—and they know that the new Fresh'nd-Aire Humidifier is THE answer to the problem.

Mail coupon today for all the profit-packed facts!

**SPECIFICATIONS:**  
Fresh'nd-Aire Humidifier Model No. 600  
16 1/2" high, 12" diameter  
weight fifteen pounds  
Shower 18 watts, shaded pole, 50 cycle, 115 volt, A.C.  
Underwriters' Laboratories Approved—UL No. 4259  
Approx. 12,000 cu. ft. wetted air per hour  
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Gentlemen: Without obligation, please send me complete details about the new Fresh'nd-Aire Humidifier.

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## Service Warranty Would Protect Contractor on Contingent Liabilities

LOS ANGELES—A service warranty on repair, labor, and/or material that protects the refrigeration contractor against contingent liabilities such as food spoilage or lost gas has been recommended to the National Association of Refrigeration Contractors by the Refrigeration Contractors Association, Inc. here recently.

The local group's recommended warranty would read:

"The seller warrants the workmanship and materials supplied by it against defects for a period of 30 days and shall be liable only for replacement of such workmanship and/or materials as it finds were defective and buyer hereby waives any and all claims for consequential and other damage which might arise therefrom."

The Los Angeles association commented that "the 30-day period mentioned in this clause is suggested and recommended as a sufficient warranty period for service or repair work, and should not be confused with the one-year warranty on material and 90-day free service normally furnished with the sale of new equipment."

## Alter Co. Announces \$18 Launderall Service, Installation Charge

CHICAGO—Because of increased labor and material costs, the Harry Alter Co. here, distributor of Launderall home laundries, has established an \$18 installation and one-year service charge on Launderall equipment in Zone 1 of its territory.

In making the announcement, the company explained that this charge included normal installation, one-year warranty service, and user's instructions.

The company further stated that a dealer in Zone 1 who had an installation outside this zone would be charged a higher rate in proportion to the distance involved.

## Year-Round Conditioning Helps Cafe Beat October 'Heat Wave,

OMAHA, Neb.—Jack and Gus Siderts, who held the grand opening of their new Palace Billiards & Cafe, Fourteenth and Douglas Sts., in October, report that the year-round air conditioning system has been a major factor in attracting a patronage far beyond their expectations during the unseasonably warm weather of late October.

The air conditioning and heating installation was made by the Sidles Co. of Omaha.

## Product Engineer

Mechanical engineer, with 7 to 10 years industrial experience, to take full responsibility for development and design of self-contained air-conditioning equipment. Must be thoroughly familiar with modern production methods and must have demonstrated ability in creative development and product design work. Knowledge of air-conditioning desirable, but not essential. Location, New York State.

Box 2563, Air Conditioning & Refrigeration News

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PERFORMANCE  
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## Missouri Dealer Puts 5% of Equipment's Sale Price Into 'Service Reserve' To Cover Cost of Callbacks

KIRKSVILLE, Mo.—One way to handle expensive callbacks or free service which must be given long after refrigeration equipment is out of warranty, is to provide for them "in advance," according to Raymond Newcum, head of Raymond Newcum Refrigeration Sales & Service Co. here.

One of Hussmann's top dealers, and serving 18 counties in northeast Missouri, Newcum discovered a long time ago that nothing cuts into profit revenue more than long trips out to a prospect's door to adjust a refrigerator, replace belts, etc., on a gratuitous basis.

Therefore, the company has created a 5% "service reserve," which means that 5% of the sales price of any piece of refrigeration equipment is retired into this fund, to cover the cost of callbacks and missionary work.

Thus, whenever it is necessary to send a serviceman on a long trip, often as much as 100 miles, to maintain a customer's good will, all expenses for the trip are charged to the "service reserve" fund. At times, these expenses have amounted to as much as \$500 per month, according to Mr. Newcum—but the good will is well worth it.

## Kold-Makers, Inc. To Sell In West Virginia, Ohio

WHEELING, W. Va.—Incorporation of the Kold Makers Co. here to sell and service air conditioning, refrigeration, and associated equipment in the state of West Virginia was announced recently by C. H. Smith, president.

Now known as Kold Makers, Inc., the firm covers four counties in West Virginia and three in Ohio, Mr. Smith added.

Other officers of the corporation are R. V. Pinto, vice president, and J. M. Pinto, who is both secretary and treasurer.

The firm is located at 3746 Jacob St. here.

## 2 Banks, 1 Dept. Store Accept Bids from Y-B Refrigeration Co.

CLEARWATER, Fla.—The Y-B Refrigeration & Air Conditioning Co., Inc. here, has been awarded a contract to air condition the Florida National Bank building in St. Petersburg and also in Bartow, Fla., T. R. Yarbrough, president and chief engineer of the firm, stated.

The firm was also awarded the contract to furnish and install all the refrigeration compressor units and accessories for Maas' new department store in St. Petersburg. About 19 separate refrigeration systems are to be installed, varying in capacity from 1/3 to 5 hp., an announcement from Y-B said.

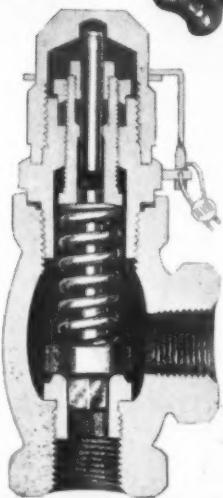
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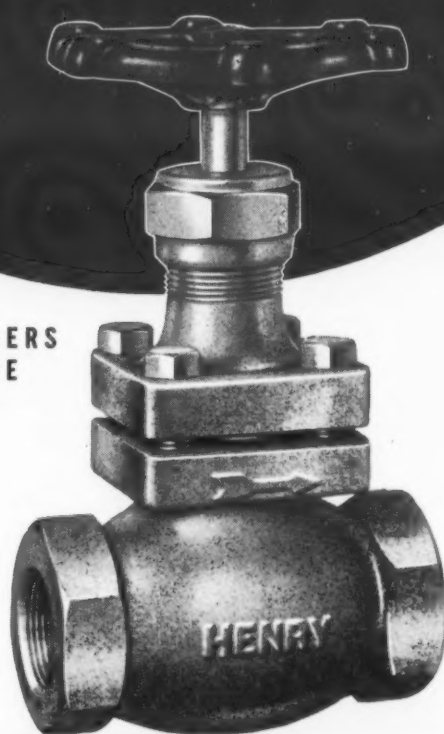


### PRESSURE RELIEF VALVE

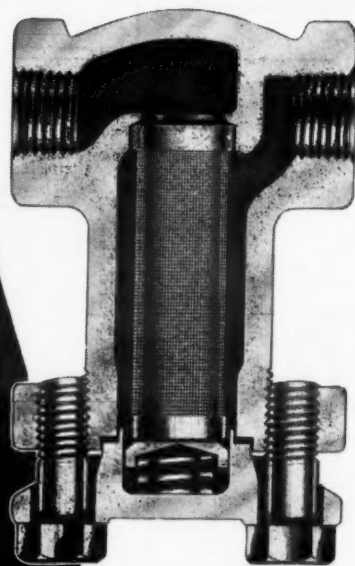
Accurate release and positive reseating action. Soft alloy metal seat and extended stem permit emergency reseating without removing valve from line. Sizes 1/4" to 2" inclusive.

For more than a quarter century, the continued preference shown in the refrigeration and industrial fields for premium-grade Henry Valves, Fittings, and Accessories can be traced to the exclusive patented features of design and construction found in many of the Henry Products.

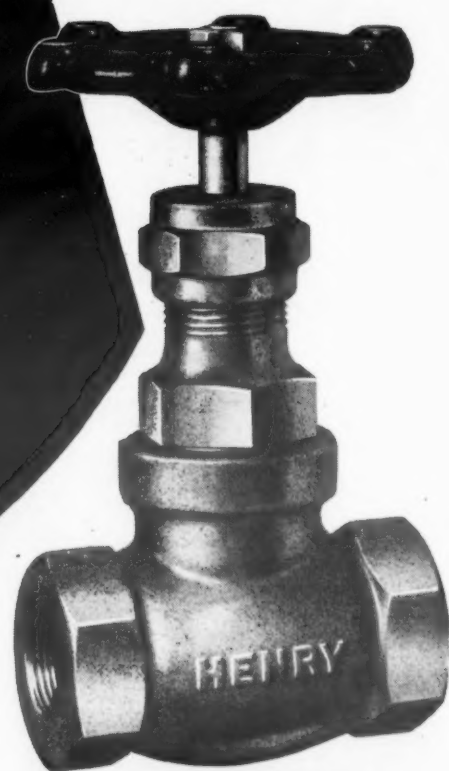
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### Mr. Smith Goes to Pontiac:

## Ex-Biology Teacher Finds Good Reaction to Locker Plants in Medium-Sized Mfg. City

PONTIAC, Mich.—Five years ago, Stanley Smith was teaching biology in a Detroit suburban school. He knew practically nothing about refrigeration or meat processing.

Today, he is the operator of a 1,200-locker frozen food plant in the heart of this industrial city and a member of a holding company which owns a 650-locker plant just out of the downtown district. Annual volume of this enterprise is estimated to be about \$100,000.

This flourishing business was developed in competition with several other plants in the Pontiac area. What policies and methods are responsible for the success of this novice to the locker industry?

One answer is summarized in the heading over an advertisement put out last spring: "Nicer beef at lower prices now!"

"Meat rents lockers," Mr. Smith explained, pointing to a copy of the advertisement on the sales room wall. "Remember we carry a full line of choice meat which we sell at real savings," it read.

"Right now the beef you can buy is better than at any time of the year. Fine, prime, select beef is coming to market in large quantities.

"By having us process your summer requirements and place it in your locker now you do two things for yourself: (1) You are insured against having to pay a higher price for beef later on. (2) You will be

eating high grade, prime beef later on when only the poorer grade beef is available in the markets. . . .

"We'll keep you advised on what to buy and when to put it in your locker. By following our tips you will have the cost of your locker rental many times over in the course of a year. . . ."

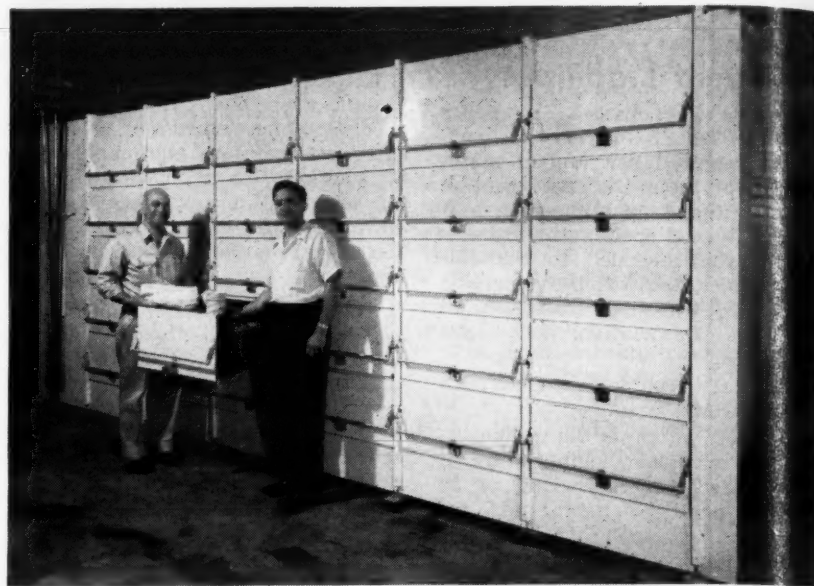
This policy of brokering choice beef to customers and putting it in their lockers (at a 10% mark-up) has worked out very well, according to Mr. Smith. It has become particularly popular with the many professional people among his patrons, 70% of whom are city dwellers.

"A number of these professional people rely on us to do all of their meat shopping," Mr. Smith said. "They tell us to put meat in their lockers when the price is right. We buy \$150 to \$200 worth of meat at a time for some customers."

Locker facilities are promoted also through the sale of home freezers. Mr. Smith is one of the school which thinks a freezer owner will use a locker plant more often than a non-owner.

A sign on the wall of the sales room in the downtown plant—Farm Fresh Frozen Foods—tells visitors that a 100-lb. home freezer (Frostmaster) and a three-year locker rental can be had for \$199.50. Mr. Smith added that a one-year locker

### This Unit Plays Dual Role in Locker Plant



This 60-unit Iceberg Locker System in the Farm Fresh Frozen Foods locker plant in Pontiac, Mich., not only augments the 1,200 conventional lockers but serve as a demonstration unit for the equipment sales outlet which is operated out of the same retail salesroom used by the locker firm. Other equipment sold out of the locker plant includes home freezers and a self-service food dispenser for stores. Home freezer sales are tied in with locker rental.

rental goes with the purchase of a Philco or Deepfreeze unit.

Freezers are sold out of the same sales room used by the locker plant. They are handled by Fred L. Maurer, operating as Refrigeration Sales & Service. He also handles the Frez-O-Mat self-service food dispenser, beer coolers, and Iceberg Locker Systems. On the latter he covers 18 counties in Michigan's "thumb" district.

At one time, Mr. Maurer merchandised the low-temperature equipment for the locker plant. But Mr. Smith decided it would be more profitable to have equipment sales handled as a separate operation. So he turned this part of the business over to Mr. Maurer in return for a certain percentage of the gross profit.

Home freezers are spotted around Mr. Maurer's share of the sales floor. A Frez-O-Mat, filled with commercially packaged frozen foods, operates from the center of the room where locker patrons cannot miss it. In the back room stands a 60-unit bank of Iceberg lockers, with most of its lockers rented.

Since Mr. Smith considers processing of vital importance in satisfying patrons, particular attention is paid to this operation. Meat is carefully cut to customers' specifications at a fee of three cents per pound.

#### Good Processing Vital

All processing is done in the smaller locker plant at 716 Glenwood Ave. A holding company formed by Mr. Smith and his two brothers, Arthur and Stuart, leases this plant to William Rarick, who operates it under the name Pontiac Fresh Frozen Foods.

It was here that Mr. Smith got started in the locker business. He and his brother Stuart purchased this plant in May, 1943. Within a few months the waiting list for lockers had grown so long that the two de-

cided to expand their operations.

In January, 1944, they leased part of the building at 42 Orchard Lake Rd. which now houses the downtown plant. Later, Stanley Smith became a sole owner of this plant when Stuart went into another business.

#### High Ceiling Permits Added Floor

The refrigerated area of the Orchard Lake Rd. plant is divided into two rooms, one above the other. This was done because the original one-story room had a very high ceiling.

About a third of this refrigerated space is devoted to bulk storage. Two ammonia units provide refrigeration.

Each of the 1,200 lockers hold 200 pounds of frozen foods. Lockers are arranged in tiers of five, with the bottom row renting for \$21 a year, the next two rows for \$18, and the top two for \$16. For 60 cents a year additional, patrons are protected against food losses due to floods, burglaries, and power failure. Overflow foods are stored for \$1 a month if the quantity is not too great.

A triple-check system is used to insure the right food getting in the right locker. A customer's order is made up in triplicate; one copy goes to the customer, one is put in the locker, and one remains with the meat to be processed. When the meat is ready to be put in the locker, the latter two copies are compared.

Locker services are promoted chiefly through direct-mail advertising. Mr. Smith has found this medium to be the most effective. He writes his own copy.

Although there is no waiting list for the lockers, they are pretty well occupied all the time. Another practice of the firm is responsible for this: the lockers are constantly being surveyed and when one is found to be nearly empty, the renter is encouraged to replenish it.

# 3 Big Reasons Why

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*They Admire the  
Fine HUSSMANN Engineering*

Competent, experienced Refrigeration Service Men tell us that it's a real pleasure to work on dependable, HUSSMANN Equipment. It's simply the admiration one good workman always has for another's fine workmanship.



*They Appreciate the  
Liberal HUSSMANN Contract*

Service Men who work for HUSSMANN in the field are protected by a contract which assures them complete protection as to rates, compensation, etc.



*They Profit Through HUSSMANN'S Huge Volume*

Because HUSSMANN Equipment is in such great demand—and because so many HUSSMANN Installations are constantly being made—Service Men in every section of the country get regular, frequent calls that result in a dependable, consistent source of income.

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## INSIDE DOPE

by GEORGE F. TAUBENECK

(Concluded from Page 1, Column 1)  
newly born children a better shuffle of the cards.

All right. The big point to remember is that this "religion"—like all political platforms—offered a theoretical answer for every problem—an answer which hadn't been tried out yet.

After Italy, Germany, and Russia gave Socialism-Communism-Fascism a "go ahead" signal, it soon became apparent to the brighter of the so-called "intellectuals" that there were flaws in their pet theories. If, to make the New System work, you had to starve millions of farmers, throw other millions of independent thinkers into concentration camps, depress the standard of living for everyone, and start wars in order to maintain power, there must be something wrong with the System, they reasoned.

### They Change Their Minds

Observing with their own eyes that Communism-Socialism-Fascism worked out that way, the "intellectuals" who fostered the Religion of State Controls began to hedge a bit on their predictions. And soon that dynamic political movement—the so-called "Wave of the Future"—lost some powerful adherents. Ardor for the New Religion even dissipated amongst some of the intellectuals in Holy Russia.

That latter fact is one key to Russia's present policies of expansion and obstructionism. Either Communism must conquer the whole world—or quickly—or it will be a dead ideological duck. If the "intellectuals" withdraw their support of Communism, it can't survive—nor can the Communist dictators.

As Machiavelli put it so deftly in his cynical essay, *The Prince*, a dictatorship can be maintained only by exterminating all its rivals. So, Communism-Socialism-Fascism can't exist unless dissenters are removed. If Government is to control all property: it must control all private actions, erase all "subversive" thoughts, kill all independent thinkers, take children away from their mothers so as to indoctrinate them in party-line thinking, and peer through keyholes into bedrooms in order to maintain the birthrate.

In trying to elevate the "common man," the Communist Dictator makes the latter his slave. He can do no less. It's the only way his "over-all plan" can succeed.

That's all there is to it, really. By attempting to make things better, the "intellectuals" who are for an all-powerful State would make life infinitely worse for the average human being.

All new religions win converts by cultivating the disaffected, the dispossessed, and the dissatisfied.

Most of us covet a better, happier

existence. We'd like to have more money, we're sick-and-tired of the old routine, we're envious of those who have new automobiles and beautiful homes, we'd like to travel, and we wish to hell something could be done about those pestiferous close relatives or neighbors who get in our hair. And we hate "the boss." We'd like to tell him a thing or two, the old So-and-So.

So a new Messiah comes along. A Huey Long, perhaps, or a Karl Marx. He promises everything to all people. If we'd just switch religions, he says, everything will come out all right, all our problems will be solved, and we'll live off the fat of the land while working just a few hours a day.

This is exactly the sort of argument which appeals to the tired worker who is puzzled because he can't make both ends of his budget meet, and whose heart is full of envy.

It sounds good. It sounds wonderful. It isn't his fault that he doesn't have all the good things in life—the New Messiah preaches. It's the fault of a dirty capitalist—like His BOSS—who may live in a big house and take a vacation in Florida when he's old and gray.

"The Boss" makes money we should have. That's the argument. We like to hear it, so it seems convincing.

Ergo, the tired, bewildered man "gets religion," and joins a new party which overpromises things it can't deliver.

### It Seemed Like a Good Idea at the Time

How many gorgeous dreams of this nature have floundered upon the Rocks of Reality nobody will ever be able to record.

"It seemed like a good idea at the time."

Ah, yes. You've heard the story about the Goose that laid the Golden Eggs. . . .

"Murdering the boss" (substituting stultifying Bureaucracy for dynamic Capitalism) merely sets up a new and less useful Boss: the appointed Bureaucrat, who won't try to get anything done because it's too much trouble, and because he's afraid to stick his neck out. He's too wound up in "red tape," protocol, and seniority to do anything progressive which might really benefit the so-called "common man."

The Sins of Bureaucracy should be the subject of another essay—and will be. Let us content ourselves at this point by observing that the Bureaucrat—the fellow who has the real say-so in a Planned Economy—is probably the most hated and least worthy-of-respect of all human functionaries. The very nature of his job—and how he got it and holds it—prevents him from taking chances or welcoming new ideas.

Big Government depends upon the existence of too many clammy-handed Bureaucrats. It's inefficient, it's deadening, it's thwarting, and it's costly; for the foregoing reasons. Yet . . . Bureaucracy and Dictator-

ship comprise the only alternative to Free Enterprise. Naturally, the latter System has its faults, too; but under Free Enterprise everybody lives better and enjoys life more.

Our choice is this: (1) a chance to get ahead "on our own" via Free Enterprise; or (2) a piddling degree of uninteresting, tiresome, poverty-stricken "security" via Communism-Socialism-Fascism or some yet unannounced form of feudalism masquerading under the guise of a "planned economy."

All the so-called "intellectuals" who want to reform the world agree that Progress Must Be Planned. That's the major plank in their platform.

Trouble is, they never can get together on who should do the planning. Although they insist that Planning Is Essential, they scare easily when confronted with the fact that planners also must be dictators—in order to make their plans come out even.

Any individual entrepreneur whose ambitions and ideas don't fit into the Grand Plan must be eliminated forthwith, lest he interfere with the unfolding of the Master Program. That's a cardinal tenet of the planner's catechism.

So, in plumping "whole hog" for the sadly-misnamed "dictatorship of the proletariat," the harried, unsure-of-himself-and-his-exploded-theories

"intellectual" signs his own death warrant as a free man. When the time comes that he himself disagrees with the tough-minded operators of the Grand Plan, off he'll go to prison or a concentration camp.

Those goofy "intellectuals" who advocate State Planning aren't entirely "sincere," incidentally. What they propose is the adoption of their own Plan—and to hell with the rest of us.

Anyone who disagrees with them is a "dirty dog" and should be dealt with summarily.

That's how they feel, dog-gone it. We can't reason with these Russiaphiles, nor can we redeem them.

They want their way to prevail "or else."

Historically, all changes in political or religious "climates" have been preceded by "front-runners." (Thunder announces the rainstorm.) Periodically an unorthodox thinker or mystic or scientist (like John the Baptist, for example—or Newton, Darwin, Dr. Townsend, or Huey Long), shakes us out of our lethargy by announcing a radical explanation of the way things happen, or a revolutionary pattern for changing the way we live. What's more, he and his followers "gospelize" this advanced theory (try to shove it down our throats).

This radical evangelism doesn't set well with most of us, but in time

it may upturn the foundations of established ideas and ideals. Next thing we know, organized representatives of the "new order" are pounding on the doors to legislative halls and screaming for admittance.

Time flies, and before we are ready to meet the onslaught of this New Conception, our design-for-living is crumbling all around us, because the New Religion has captured the imagination of "the Masses." Then there's hell-to-pay.

Perhaps a Sir Isaac Newton has thought out a new concept which the world needs. Or let us say that a Dr. Townsend has introduced an economic *faux pas*. Each gets the same treatment at the hands of the public. *New ideas spark explosive changes.*

Yes, ideas ARE important. They set the stage for revolutions. Long, long before normally inert masses of people act, the idea-generators have publicized their theories and implanted them in the bovine minds of the inarticulate.

And, no matter what the believers in the Rhythm of Cycles may tell you about the inevitability of large-scale movements, dramatized new ideas do breed emotional mob spirit and mass action.

As a protection against the worst of them, and as a cradler of the best, constitutional government (rule by laws, rather than by men) has been evolved by democratic republics.

(To Be Continued)

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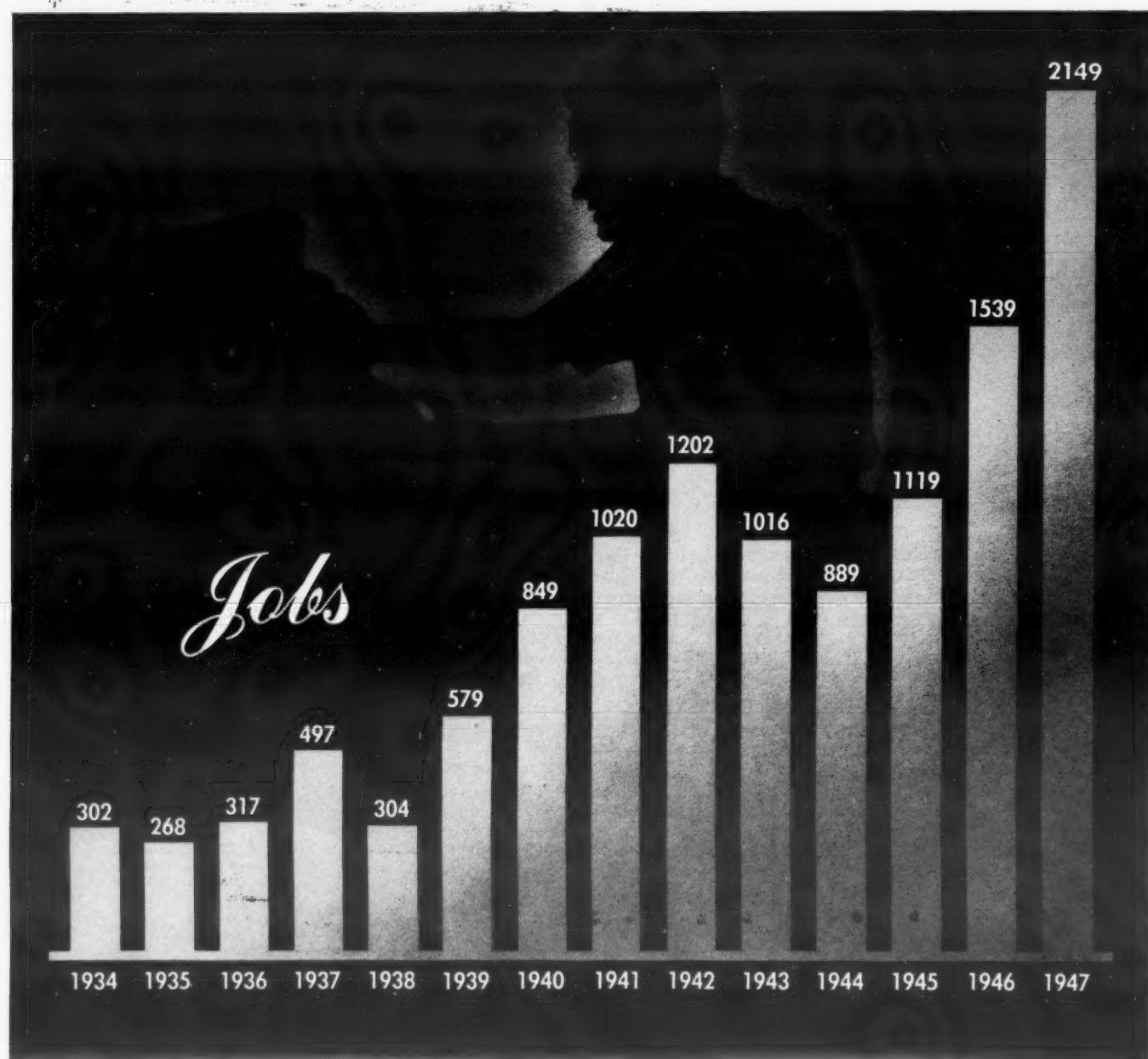
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## How To Pre-Test Proposed National Legislation

LEGISLATURES of the 48 States are the "farm clubs" of Congress. Why? Because State legislation permits of experimentation, of try-outs. If three or four states pass community property laws, for example, the other forty-odd states can observe that experiment at arm's length, and note how it works. And if this experimental legislation doesn't stand the gaff, damage and folly are confined to a limited area. If it does prove to be practicable and beneficial, it can be applied to the nation as a whole.

On the other side of the fence, there is this to consider:

America's 48 states differ enormously in wealth, climate, soil, income, urbanization, personal attitudes, and degrees of industrialization. That's why most laws passed by state legislatures are germane and pertinent to the local conditions which exist in each of the various states. Such Acts reflect the needs and the thinking of their people. But the very fact that they buddy up to local conditions comprises a reason why State legislation should be scrutinized closely by Congressmen. The ultimate effect upon the entire nation of these Acts should be a matter of concern to every Senator and Representative.

Should one State enact legislation which harms employers, for example, industries are likely to move from that state to another, more friendly state. On the other hand, if hand-outs to the indigent are over-generous in some States, lazy folk migrate to those regions. Net results of these misplays should be assessed properly by national law-givers, and nullified—if possible—by national umpiring.

One proper field for state legislation is that of preventing merchants, farmers, landlords, employers, or employees from forming monopolies and combinations-in-restraint-of-trade to exploit provincial legal advantages (which are often won in return for contributions to political machines).

That is, much local legislation should be negative rather than positive. It should prevent crime, rather than checkmate initiative. (And so should all law-making, for that matter.) Here's a specific example of this principle:

Some few states have enacted paternalistic labor legislation which is apparently based on the theory that the typical union member is too dull and stupid to secure a proper price for his labor. That's a flat fallacy, and an insult. The man whose pennies are important watches them carefully. He doesn't sell his services cheaply.

But reforming do-gooders fail to realize this. They're unwittingly eager to make every American a ward of government, through their holier-than-thou snide reasoning that he isn't as smart as they are. This is, of course, the philosophy of socialism and communism. Wherever and whenever this philosophy has permeated any nation, it has produced disastrous results. Government dictation of workers shouldn't happen to a dog—and surely not to an American.

If we admit that union members aren't bright enough to look out for themselves, we also must agree that they are too "dumb" to vote. In other words, they should be ruled by theoretical "perfectionists" and politically popular self-seekers. But how can anyone assume that idealists or politicians will be any more intelligent and just than are employers, or those managers and judges chosen by the people themselves in honest elections?

Free elections in our nation's 48 states are a reaffirmation of the personal importance of each voter. Screwball ideas can be tried out—and old non-sequiturs discredited—by state legislators before they are imposed upon committees which screen suggestions sent to the Congress of the United States.

Let's insist that immature reformers undergo a "tryout" in a state or two before they are allowed to bat in the World Series of U. S. congressional action.



## FFLI Campaign Asks Operators To Increase Locker Rental Rates

OMAHA, Neb.—A campaign to induce present locker operators to raise their rental and processing charges so that new plants coming into the field will not find the competition too severe and will be able to show a decent return on present construction costs has been launched by the Frozen Food Locker Institute, according to Ray R. Farquhar, executive director.

The campaign, Mr. Farquhar said, is based on two premises:

1. The great majority of locker customers are well able to afford higher prices.
2. The cost of everything entering into the operation of a locker plant has risen far beyond the point where the rental of lockers at the old prices of \$10 and \$12.50 per year makes any sense at all.

To support the first premise, the Institute has compiled a list of prices of farm products showing the rise between 1938 and 1947.

"The rise in some items is almost unbelievable and it is certainly perfect evidence of the farmer's ability to pay far more than the scale presently charged in many plants throughout the United States," he declared.

Expanding on the second premise, he stated, "Everything which businessmen have to buy today has increased in cost by leaps and bounds.

"That holds true for his personal needs as well as for wages and materials which must be used in the operation of a frozen food locker plant.

"Salaries for butchers and plant managers are at least double what they were 10 years ago. Rent, paper, and all other items have advanced to a marked degree. Where a locker operator is engaged in another business in conjunction with his locker plant, the price of everything he sells has risen proportionately.

"According to the U. S. Bureau of Labor Statistics, the cost of living today is 52% more than it was 10 years ago. It all boils down to the fact that the locker operator is still charging \$10 per year rental for his locker is actually receiving about \$5, an amount which he certainly would not have considered adequate when he installed his plant, and which is certainly inadequate now."

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## Currie Chosen Temporary Head of Group Organizing Western Michigan ASRE

NEW YORK CITY—R. H. Money, president of the American Society of Refrigerating Engineers, has announced that steps have been taken to form a Section of the Society in Western Michigan, to cover the area which includes Muskegon, Grand Rapids, Lansing, Battle Creek, and Kalamazoo.

A meeting of members and prospective members was held in Muskegon on Oct. 22, at which temporary officers were elected to carry through the original organization work. W. L. Currie of Norge Division, Borg-Warner Corp., was named chairman, W. G. Winkler of Brunswick-Balke-Collender, Muskegon, was selected temporary secretary, and Ed. Campbell, of the Grand Rapids Office of Wolverine Tube Division, was appointed chairman of the Membership Committee.

To assist Campbell in membership work, several members and prospec-

tive members in the area have been selected as members of the Membership Committee. They are: George Fleck of Norge in Muskegon Heights, Frank Walsworth of Brunswick-Balke-Collender, Muskegon, B. A. Devine of Mueller Brass Co., Grand Rapids Office, O. S. McGuffey of Lansing, Herschel Powell of Gibson Refrigerator Co. of Greenville, and Carl Whipp of Ranco, Inc., who makes his headquarters in Ann Arbor.

Plans are being formulated for the first regular meeting in the area at a date to be announced by Currie. Anyone interested in membership in the Section is invited to get in touch with any of the temporary officers of Membership Committee personnel.

## Mazer Refrigeration Contracts For \$32,000 Office Bldg. Job

BIRMINGHAM, Ala.—Contract for a one-story office building has been let by the Boggs Brokerage Co. Mazer Refrigeration & Air Conditioning Co. has the contract for refrigeration, air conditioning, and heating at \$32,000.

## 37 Years with Seeger, C. A. Muessel Retires

NEW YORK CITY—C. A. Muessel, vice president and eastern sales manager of the Seeger Refrigerator Co., has retired after 37 years with the company.

Seeger recently announced its withdrawal from the commercial field under their own trade name of "Seeger," as the firm is now concentrating on the manufacture of commercial refrigerators and household refrigerators for other concerns.

Muessel began his employment with the Seeger Refrigerator Co. in St. Paul, Minn., in 1909, and in 1917 opened the Boston branch. Two years later he took over the New York branch office and has been in charge of that operation until his retirement.

## \$40,000 Capitalization Set

BUFFALO—Frontier Refrigeration Co., Inc. has been incorporated here with capital of \$40,000. Incorporators are Paul B. Readett, Robert D. Fowler, and Elmer L. Gayvert.

## Wisconsin Contractors Set First Convention Program

MILWAUKEE—Warren W. Farr of Cleveland, president of the National Association of Refrigeration Contractors, will be one of the speakers at the first convention of the Refrigeration Contractors' Association of Wisconsin. The convention will be held at the Schoeder hotel, Milwaukee, on Nov. 29 and 30.

Another speaker will be E. S. Wright, vice president of the national organization. Paul Reed of Perfex Corp., also will speak.

An invitation has been sent to every Wisconsin concern that sells, installs, repairs, or services refrigeration equipment.

## Reynolds Names Distributor

LOUISVILLE, Ky. — Reynolds Metals Co. here has recently named the Brass & Copper Sales Co., with outlets in St. Louis and Kansas City, Mo., distributor for its aluminum mill products, according to D. P. Reynolds, vice president.

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## Warm Air Group's Heating Engineering Conferences Extended to 3 Days In 1948

CLEVELAND—The National Warm Air Heating and Air Conditioning Association announces that its heating engineering schools, known as Indoor Comfort Conferences, are being expanded to three days for 1948.

This expansion was necessary to provide time for the new material which is being added to the instruction program. Next year's schools will include instruction in the use of the new Manual 7-A for the design and installation of warm air ceiling panel systems (radiant panel heating); instruction in the use of the new Manual 9 for large residential, commercial, and industrial warm air heating systems; instruction in the use of the new Short Forms based on Manuals 5, and 7 giving a shorter, quicker method for designing the conventional residential gravity and winter air conditioning systems; and information on the merchandising of warm air heating equipment.

All of the above material will be presented in addition to the work given in the schools this year on heating fundamentals; making a heating survey; heat loss calculations; and adjusting and servicing of warm air heating systems. The three-day program will be a well-rounded course of instruction, and will give the warm air heating contractor the tools he needs to design and install all varieties of warm air heating systems, and to meet com-

petition in all phases of the heating field.

The instruction is all of a practical nature, and the design procedures given are such that they can be readily used by the heating contractor in his daily work. The instruction is adapted to suit the local climatic conditions which vary widely when conferences cover an area.

The first four conferences scheduled, and the name of the local chairman of each, are as follows:

Louisville, Ky., Jan. 7, 8, and 9—H. B. Villevik, Hart Furnace & Supply Co., 238 East Main St., Louisville, Ky.

Nashville, Tenn., Jan. 14, 15, and 16—Frank Cline, Cline Air Equipment Co., 311 Eighth Ave., So., Nashville, Tenn.

Knoxville, Tenn. Pending. Will probably be week of Jan. 19—W. S. Willis, C. M. McClung & Co., Knoxville 7, Tenn.

Birmingham, Ala., Jan. 28, 29, and 30—George F. Wheelock, The Geo. F. Wheelock Co., 3013 S. Second Ave., Birmingham, Ala.

Detailed information and registration blanks for each of the above conferences may be obtained directly from the respective local chairmen.

The tuition fees for the three-day schools will remain the same as they have been for the two-day schools since June of this year in spite of increased costs in the operation of the school program.

## Dairy Store Finds Air Conditioning Cost Averages Only \$1.25 for a Long Day



Air conditioner is located inconspicuously at the left rear corner.

YOUNGSTOWN, Ohio—For an average daily cost of only \$1.25 per day Isaly Dairy store here has achieved greater employee comfort and efficiency and improved its business by installing a Chrysler Airtemp

model 5-SCA "packaged" air conditioner, said E. E. Isaly, owner.

Mr. Isaly further emphasized the low cost of operation by pointing out the long hours which a dairy store is kept open.

### Connor Issues Data Book On 'Kno-Draft' Air Diffuser

NEW YORK CITY—A new catalog and engineering data book on "Kno-Draft" adjustable ceiling air diffusers has been issued by the W. B. Connor Engineering Corp.

Containing all the information and data necessary for the proper selection of air diffusers in one complete and concise manual, the handbook is designed for architects, engineers, and contractors—in fact every person concerned with the science of mechanics of air distribution. Besides full catalog data on the several Kno-Draft diffuser types and accessories, much information of a general nature on the subject of air diffusion is included, the entire material being presented in an unusually graphic and simple manner.

These new handbooks may be obtained by request, on letterhead, for Bulletin K-20, to W. B. Connor Engineering Corp., 114 East 42nd St., New York 16.

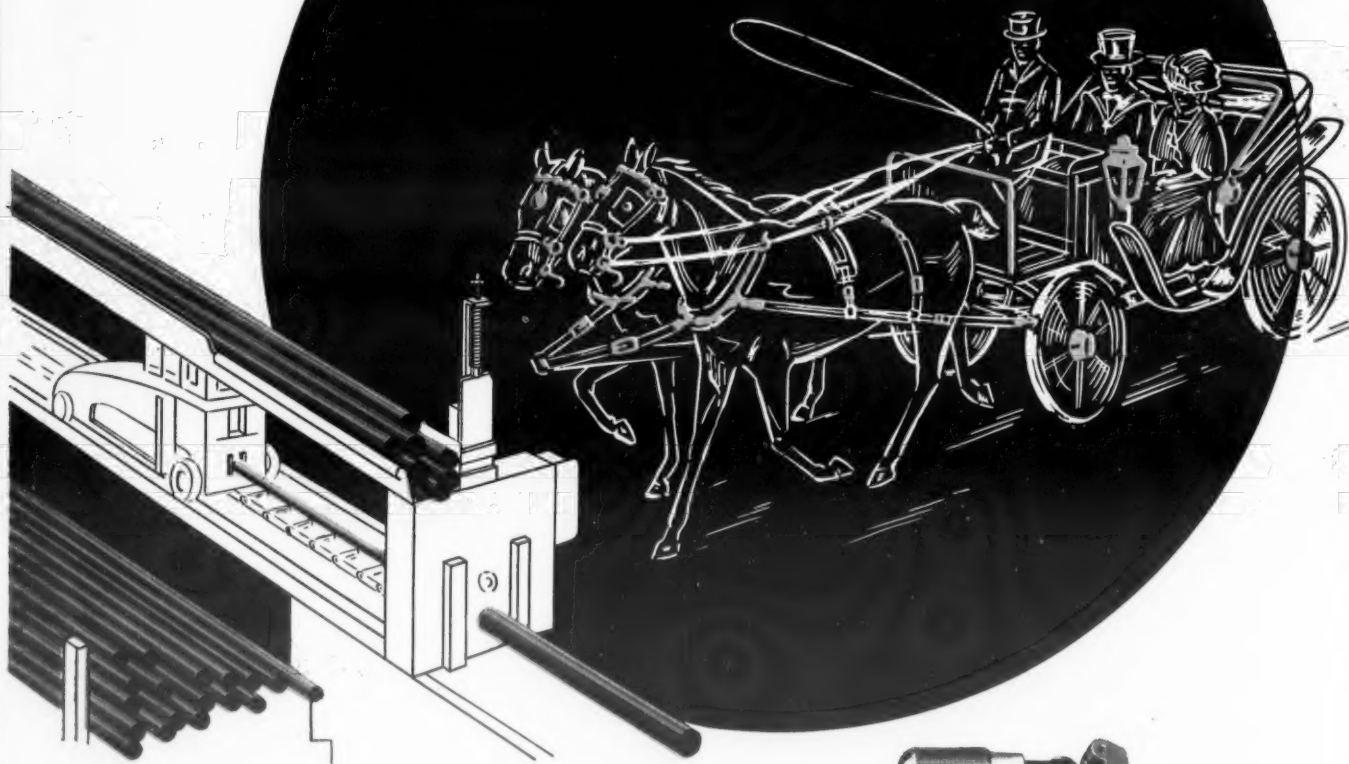
### Johnson Builds 15-Story Wax Research Tower Designed by F. L. Wright

RACINE, Wis.—Ground was broken on Nov. 6, by S. C. Johnson & Son, Inc., wax products manufacturer here, for an air conditioned 15 story Wax Research Tower which will be a feature of the new laboratory designed for the company by Frank Lloyd Wright, noted architect.

The tower, constructed of brick, glass, and reinforced concrete, will stand 40 ft. sq. and 150 ft. high. It will be supported by a circular masonry stem extending 50 ft. into the ground. Floors will be connected to this stem at each of the 15 levels and serviced from it.

Curtain walls will be of tubular glass with intermediate narrow bands of masonry at the main floor levels. Alternating with main floors will be circular floors 38 ft. in diameter, contained entirely within the curtain walls.

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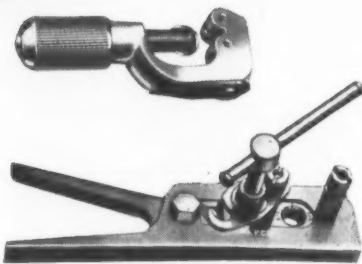
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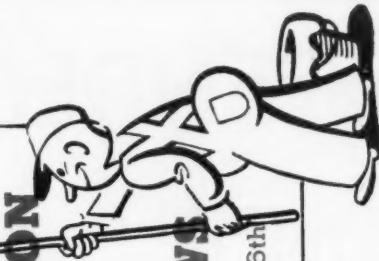
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## New West Coast Half-Hour Laundry Has Air Conditioning, Lounge, Play Pen, Parking Lot To Attract Customers

LOS ANGELES—The new, automatic Half-Hour Laundry being opened in Los Angeles by ALD, Inc., (Automatic Laundry Distributors) is claimed to be the largest, most modern and well-equipped place of its kind on the west coast.

The building housing the laundry is a modern attractive building utilizing glass and cast stone fronted by huge plate glass windows. Inside, soft, glareless fluorescent lamps in fixtures of the latest design flood the room with light, emphasizing its clean, attractive appearance.

Housed in an area of 2,500 sq. ft. are 40 Westinghouse Laundromat washers, 20 dryers, four extractors, and six ironers. A checking-in counter at the entrance facilitates the checking and weighing of clothes and assigning of equipment.

The new store is completely air conditioned and has a comfortable lounge area where patrons may rest and read, knit or just relax while their clothes are being washed and dried automatically. In addition, there is a completely-enclosed children's play room, equipped with toys adjoining the laundry. If the customer wishes to shop, she can do so in nearby markets and stores. Ample parking facilities will be provided at an adjacent lot.

The housewife brings her washing to the laundry, has it weighed (an average Laundromat load is 9 pounds of dry clothes) loads the machine, drops a quarter in the coin meter, puts in the necessary soap, sets a

Besides dealer promotional tie-ins, Automatic Laundry Distributors, Inc. recruited radio and film-land notables such as Actress Penny Edwards (right) to help launch its new Half-Hour Laundry on Sunset Blvd. Forty Westinghouse "Laundromats" are used in this "self-serve," air conditioned laundry.



dial for the type of clothes being laundered, and turns on the starting switch. Thirty minutes later her clothes have been gently and thoroughly washed, rinsed three times, and spun almost dry—and not once were her hands required to touch water.

If she has any doubts about certain washables several attendants under the direction of a competent supervisor are ready and willing to give her expert advice on how they should be laundered.

If she wants her clothes bone dry, or just dry enough for ironing, she transfers them to an automatic dryer where they are gently tumbled in heated air. If she wishes to complete the job and iron the clothes, six ironers are nearby in small private booths, for her convenience. If she has never used an ironer, one of

the attendants will demonstrate its use.

The new Half-Hour Laundry was built and will be operated by ALD, Inc., the only authorized exclusive nation-wide distributors of Westinghouse coin metered laundry equipment. They have stores in various parts of the country which serve as demonstration points for electric washing equipment for home-owners and for future operators of similar half-hour laundries. In addition, prospective operators are given the opportunity of working in one of these stores before actually managing one of their own.

The Sunset Boulevard establishment will serve as west coast headquarters for ALD, Inc., under the supervision of Don Reisser, West Coast branch manager, and will cover eight western states.

## Chicago Health Examiner Disputes Launderette Claim of Bacteria Killing

CHICAGO—All disease producing bacteria on clothes laundered in coin-operated Launderettes here are not being killed during the washing and rinsing process, as required by law, asserts Dr. Herman N. Bundesen, president of the Chicago Board of Health.

Examinations have shown that water in the Launderettes are not being maintained at the necessary 175° F. to do the job, he said.

However, he added that "most kinds of disease germs which might be found upon garments, clothing, bed linen or towels in the average family wash would ordinarily be killed in the washing and rinsing process."

Robert Bailey, Chicago district manager of the Tele-Coin Corp., which handles Launderette franchises, declared that he was sure that the machines were killing all harmful germs.

He stated that the Launderette stores have been told to flush out the machines after each washing to assure that no bacteria remained. He added that woollens, which cannot be washed in 175° F. water without damage, are treated with disinfectant. There is a possible danger when two consecutive batches of woolen material is laundered, Mr. Bailey conceded.

## Bendix Washers Have Role In Restaurant, Home

NEW ORLEANS — Serving two purposes is the lot of the Bendix automatic washer at the residence of A. S. LaFrancas. For not only does the washer do the family laundry, but it is also called on to keep the linens and uniforms in the family's restaurant, which is downstairs, clean.

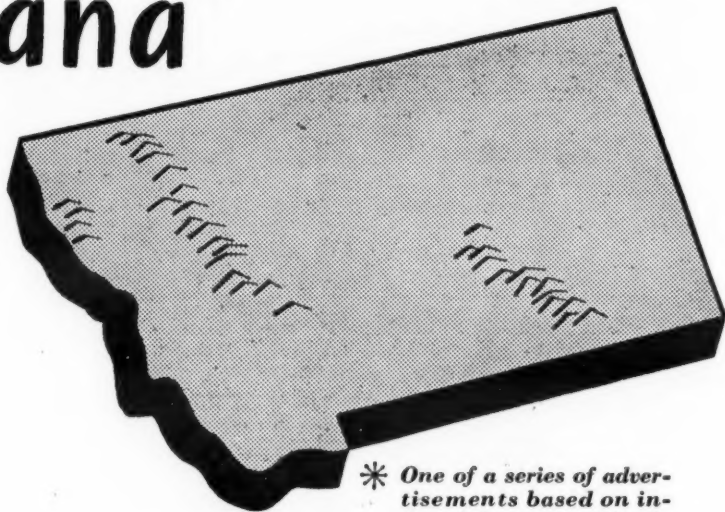
In its more or less commercial capacity the Bendix washes 120 tablecloths, 350 napkins, and 10 waitress uniforms daily. Two other automatic washers are serving dual purposes in other home-restaurant combinations in this city. They are in operation at the Irwin and Ziblich restaurants.

## Construction Begins on Servel Distributor Office-Warehouse

OAKLAND, Calif. — Household Products Co., distributor of Servel gas refrigerators and water heaters in northern California for nearly 10 years, has recently announced the beginning of construction on its new office and warehouse building here. The structure of modern design will be located at E. Twelfth St. and Twenty-Ninth Ave. When complete the building will provide a display room for the convenience of its dealers to supplement the permanent display at the Western Merchandise Mart in San Francisco.

# Montana

WEALTH OF MINERAL DEPOSITS  
IMMENSE COAL RESERVES  
LARGE LUMBER PRODUCTION  
AVAILABLE WATER POWER  
ABUNDANT LIVESTOCK  
VALUABLE WOOL CLIP  
VARIED AGRICULTURE  
TREMENDOUS WHEAT YIELD  
SCENIC BEAUTY



\* One of a series of advertisements based on industrial opportunities in the states served by the Union Pacific Railroad.

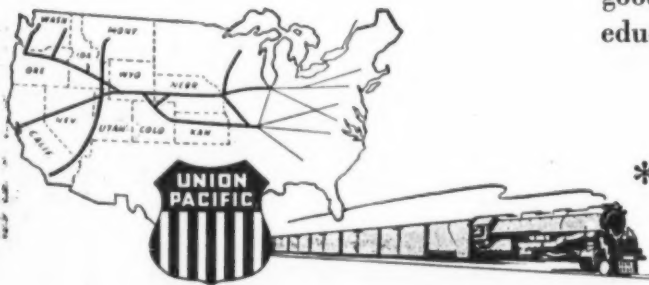
**K**nown as the "Treasure State," Montana is richly endowed with raw materials essential to industrial production. Among the many metallic minerals are silver, copper, lead, manganese, chromium and molybdenum. Coal reserves have been estimated at over 400 billion tons. The majority of the state's cities are supplied with natural gas.

Montana is a top producer of cattle and sheep, the annual sheep production being approximately two million head with a wool clip of great value. In agri-

culture, wheat takes first rank among grains. Sugar beets, potatoes, together with other vegetables, are grown on its farms. There are many thousand acres of forests, principally pine.

The Union Pacific Railroad serves Butte in the heart of the great mining area, and West Yellowstone—most popular rail entrance to the famous Yellowstone National Park.

Montana welcomes new industry. It has the space, materials, facilities and manpower to encourage firms seeking new locations. Additional advantages are good living conditions, an excellent educational system and scenic beauty.



\* Address Industrial Department, Union Pacific Railroad, Omaha 2, Nebraska, for information regarding industrial sites.

**UNION PACIFIC RAILROAD**  
THE STRATEGIC MIDDLE ROUTE

**Wall WIRE**  
PRODUCTS COMPANY  
PLYMOUTH • MICHIGAN  
Makers of  
REFRIGERATOR SHELVES • STAMPINGS  
FORMED AND WELDED PRODUCTS

Excellent deliveries.  
Fair Prices.  
Quality Products.



## Hoosier Group Sets Terms Of 20%, 24-36 Months

INDIANAPOLIS, Ind.—A schedule of required down payments and instalment periods almost as restrictive as the Federal regulations abolished Nov. 1, was recommended by the board of directors of the Hoosier Association of Credit Companies, who handle a large percentage of the credit business of the state, at its recent annual convention in the Claypool Hotel here.

The convention recognized the danger of unlimited instalment buying by the public and asked for a basis for proper down payments and economically sound payment periods. The board passed a resolution recommending the following minimums among others:

Domestic appliances such as stoves, refrigerators, etc., 20% down and 36 months to pay; radios and phonographs, 20% down and 24 months to pay; television sets, 20% down and 24 months to pay.

Directors of the association expressed the belief that most of the member companies will comply with this schedule and do not see any great dropping of credit restrictions among non-member companies and stores which maintain their own credit plans.

## Standard Size Washer Sales Jump 27% In Sept.

CHICAGO—Sales of standard size household washers in September jumped 27% over August and were 92% higher than Sept. 1946 sales, the American Washer and Ironer Manufacturers' Association has reported.

A total of 354,094 units were sold in September this year. The August figure was 279,299, and the Sept. 1946 figure was 184,215.

Portable washers with a capacity of 3 lbs. dry weight, sold in September numbered 41,287, somewhat below the 43,834 moved in August.

Ironer sales in September increased to 53,277 from the 47,577 reported for August. They were 297% higher than the 13,413 sold in Sept. 1946.

Standard size washer sales for the first nine months of this year have already exceeded by 30% those sold in all of 1946, the Association declared.

## Need for Boost In Dealer-Distributor Profit Margins Seen In Buyer's Market

ATLANTA, Ga.—Most distributors and dealers of major electrical appliances are working on a smaller profit margin now than they did in prewar years. This situation will have to be corrected as production catches up with demand and is one of the basic problems to be solved in the marketing of major appliances.

This was the highlight of a talk on "Appliance Marketing Problems" given here recently by Gerald Hulett, vice president in charge of sales, of Electromaster, Inc., to the members of the Southeastern Electrical Exchange. Speaking on margins of profit available to distributors and dealers, Hulett said:

"Under present circumstances, the dollar margins are adequate, but they will not be sufficient as soon as supply begins to catch up with the demand and manufactured goods can no longer be allocated direct from the freight car. The distributor will then have to reassume many of his old-time functions of warehousing, financing, delivery and other services for which his present margin of profit will obviously be inadequate."

Other problems of marketing discussed by Mr. Hulett included the necessity for distributors and dealers to return soon to the more extensive promotional and selling programs of the past. He pointed out that present sales efforts have, in most cases, been streamlined of necessity to match a relatively small allocation

of appliances. As the manufacturing volume increases, selling efforts must be expanded rapidly.

Hulett said that, basically, he was convinced of an increased and sound market for appliances on a broader basis than before the war. He cited the increased buying potential of America's farm population, and the almost certain increase in a national home building program, as factors which will increase the demand for electrical appliances of all kinds.

## N. Y. Store Sales Volume Is Highest Since Aug. '46

NEW YORK CITY—A 38% rise over the corresponding month last year—the largest since August, 1946—was registered by department stores here during October.

The biggest gains took place in major appliances and other heavy goods. Percentage-wise the results, culled from reports of 12 department stores, ranged from a low of 8.8 to a high of 52.7.

A *New York Times* survey emphasized two factors primarily responsible for the wide divergence between this and last year's October sales figures:

1. The warmest October on record in New York City.
2. The delivery and trucking strike in effect during October, 1946.

## C. R. Brogan Succeeds A. N. Willis as General Manager at Redisco

DETROIT—Appointment of C. R. Brogan as general manager of Refrigeration Discount Corp., subsidiary of Nash-Kelvinator Corp. is announced by George W. Mason, president of Nash-Kelvinator.



Brogan, who has been with Kelvinator for more than 21 years, has a broad basis of experience for his new post with "Redisco," which provides instalment financing service to the thousands of Kelvinator and Leonard appliance dealers throughout the country, and to Nash dealers in some states.

Brogan succeeds A. N. Willis, who resigned.

## Maytag Registers \$4,459,476 Profit for 9 Months of 1947

NEWTON, Iowa—Maytag Corp. here has reported a net profit of \$4,459,476 or \$2.29 per common share for the three quarters ending Sept. 30. This compares to a net profit of \$2,067,609, or 82 cents per common share for the corresponding period of 1946.

Net sales for the 1947 period were \$38,831,409.

HEAT TRANSFER EQUIPMENT  
**MARLO**  
COIL COMPANY  
SAINT LOUIS, MISSOURI

**MARSH**  
Pressure Gauges  
Dial Thermometers  
★The gauge with the Recalibrator.  
Ask for this New Refrigeration Booklet  
JAS. P. MARSH CORP.  
2061 Southport Ave., Chicago 14, Ill.

GET GENUINE  
**WAGNER**  
Bearings  
Wagner Bimetal sleeve bearings resist seizure, last indefinitely when properly lubricated. They come to you diamond bored to specified size; simply press in according to instructions, and reassemble motor. They are also available unbored for undersize shafts. Get them now from your Wagner distributor. Name on request.  
Wagner Electric Corporation  
ESTABLISHED 1921  
6471 Plymouth Avenue, St. Louis 14, Mo., U.S.A.  
ELECTRICAL AND AUTOMOTIVE PRODUCTS

## Bendix Production Reaches New Peak During October

SOUTH BEND, Ind. — Bendix Home Appliances, Inc., produced approximately 79,000 units in October, it has been announced by Harry L. Spencer, vice president in charge of manufacturing. Production of washers, dryers, and ironers reached new highs.

The company manufactured approximately 64,000 washers, 5,800 dryers, and 9,500 ironers.

Washer production was 88% over that of October, 1946. To Nov. 1 Bendix Home Appliances, Inc., had produced approximately 514,000 washers, compared with 222,500 for the first 10 months of 1946.

## New Source of Extra Profits for LOCKER PLANT OPERATORS

A handy "Out-Locker" at home encourages quantity buying of Frozen Foods.

Sensational New  
**PHILCO**  
FREEZER

## Leads its field in Features, Value, Public Acceptance

Plant operators report it's easier to sell Philco Freezers to locker customers, because of the extra conveniences provided in a Philco. With these easy-to-demonstrate features Philco has made the home freezer a modern time-saving household appliance—automatic, care-free and foolproof. Promote the frozen food habit with your customers by selling them Philco Freezers. Write for information about this *plus profit* opportunity to Philco Corp., Philadelphia 34, Pa.

### Note these Philco Features:

- Temperatures of 10°-20° below zero!
- Outside Thermometer shows interior temperatures.
- Guardian Bell—rings to warn of current failure. Battery-operated.
- 3 Storage Compartments—including 1 for sharp freeze.
- Hermetically Sealed Power Unit.
- Locking Temperature Control. Stops tampering by unauthorized persons.

Available in 2½ and 5 cu. ft. sizes to fit your customers' needs.



**BUT...**  
The motor-wise public of this generation demands the best in automotive engineering. Where aluminum — and its alloys — are being processed  
**Alodizing\* With Alodine\***

**CHEMICALS**  
**ACP**  
PROCESSES  
RUST PROOFING AND PAINT BONDING  
Granodine \*  
Duridine \*  
Alodine \*  
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RUST REMOVING AND PREVENTING  
Deoxidine \*  
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PICKLING ACID INHIBITORS  
Rodine \* (R)

is as drastic an improvement over methods of the past — as today's automobiles are over the horseless carriage. "ALODINE"-coated and sealed aluminum — either painted or unpainted — is effectively protected. "ALODINE" requires no electricity or special skill — no high temperatures. In two minutes, or less, the job is finished. ALODIZED\* aluminum is highly corrosion resistant — provides a tenacious bond for paint — saves time and labor — and reduces production costs.

\* "ALODINE" (R) for Metal Coating Chemicals

**AMERICAN CHEMICAL PAINT CO.**  
AMBLER ACP PENNA.



# Interest In Electrical Heating Spurred by Low Power Rates In TVA Area

## First 8 Months See 814 Electrical Installations With 780 More Planned Before Year's End

CHATTANOOGA, Tenn.—Reflecting the growing popularity of electrical heating in this area, installations of electrical heating equipment jumped from about 300 to 1,114 systems during the first eight months of the year, the Electric Power Board of Chattanooga revealed.

The Board's heating engineers, R. E. Reeves and R. J. Cooper, Jr., pointed out that 780 more installations are planned and the total installed by the end of the year should reach 1,400.

### CHEAP POWER GIVES STIMULUS

Cheap power supplied by the Tennessee Valley Authority has provided a great deal of the stimulus towards electrical heating, the engineers admitted. Even with cheap power, however, they said that the average person will find that the cost of current to operate electric heating in his home will normally exceed the straight cost of other fuels.

"By the time the savings in redecoration and labor are considered along with the increased cleanliness, comfort and convenience, he will find that his electric heating actually becomes an economical luxury," they said.

Interest in electric heating hit no lull during the summer months, they declared. "On the contrary, our office has been literally swamped by

requests for heating surveys in time for the coming season.

### JULY, AUGUST GOOD MONTHS

"During the summer, in the month of June, 60 home owners committed themselves to installing electric heating. This figure jumped to 114 in July and in August reached an all-time monthly high with 257 jobs sold in that one month alone."

They explained that the Electric Power Board offers an advisory service to prospective electric heating customers. Working from blue prints and surveys made in existing houses, they tell prospects what size heaters they need to do the job, what these heaters should cost to be installed, and what the yearly operational cost should run.

They also advise the prospect on construction and insulation of the house to insure maximum efficiency and economy of operation.

### OPERATING COST

"The average five-room house with sidewall, overhead, and floor insulation and with windows and outside doors weatherstripped is being heated for around \$75 per heating season," they declared.

"These costs may vary considerably with location, construction, living habits, etc., but will normally vary less than 10% either way.

"We have found that by using unit heaters the average well insulated house can be heated for approximately one cent per cu. ft. for the actual area heated.

### CAPACITY REQUIRED

"Actual capacity required per 1,000 cu. ft. house takes 1.6 kw. of heating capacity per 1,000 cu. ft. The 8,000 or 9,000 cu. ft. house takes 1.4 kw. per 1,000 cu. ft. and the 10,000 cu. ft. or over structure takes about 1.5 kw. per 1,000 cu. ft.—all being well insulated.

"The central furnace will average about 25% more kwh. per season than the individual units in a similar house.

"There are several reasons for this, not the least of which is the difference in the two families. We have found that the furnace man normally is not quite so economy-minded as the individual unit man and does not close off or underheat certain portions of the house, choosing to keep the whole house at a uniform temperature rather than save by closing off a bedroom, etc.

### CENTRAL FURNACE LOAD

"Most furnaces are installed in basements and the natural loss from the source of heat through the ducts to the rooms also plays an important part in the increased cost.

"It has been found that the central furnace has given this utility a better load factor than the individual units. Actually this means that the furnace operates a larger percentage of the total time possible for it to

operate in any given period of time.

"The principal reason for this is that, due to individual heaters being made in certain sizes only, it is impossible to install the exact capacity in each room that the heat loss calls for.

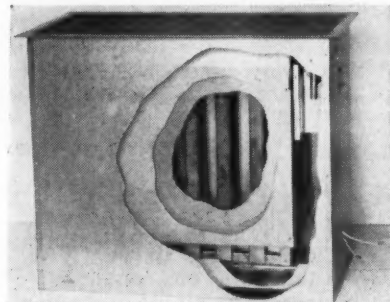
"On the contrary, the furnace, having all its capacity in a central point, can be installed to meet the calculated heat loss of the house."

The engineers estimated that of the 1,400 installations completed by the end of the year, approximately 1,000 will be individual room units (wall or portable), 200 will be central furnaces, and 200 will be floor furnaces.

## Thermostatically Regulated Floor Model Furnace Made By Electric-Aire, Inc.

CHATTANOOGA, Tenn.—Electric-Aire, Inc. here is now manufacturing a thermostatically controlled electric floor furnace, which is available in five sizes ranging from a one-room, 1,500 watt unit, to a 7,500 watt furnace capable of heating three bedrooms from a hall or large dining room and living room combined.

The unit drops through the floor and is connected to a 220-volt line.



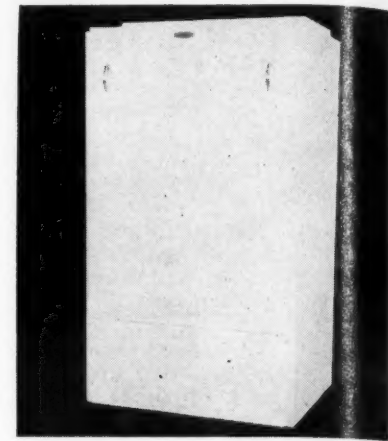
Electric-Aire floor furnace drops through floor.

The thermostat, which is in the return air chamber, is already installed. Elements of the strip heater type are vertically mounted in order to eliminate dust-catching flat surfaces, the manufacturer points out.

Cold air is drawn from the floor down across the outside portions of

the furnace and returned to the room through the center of the unit by gravity, it is claimed.

Electric-Aire also manufactures a cabinet model forced-air furnace



Cabinet model with forced air.

with models ranging from 44,219 to 113,005 B.t.u. These furnaces may be had with humidifiers if customer desires.

Controls consist of a room thermostat and three outside thermostats. Two-thermostat zone control is also available, allowing one portion of the house to be heated by separate ducts, according to the company.

## Appliance Assessment Up \$8,000,000 In Nebraska

LINCOLN, Neb.—Household equipment composed of refrigerators, home freezers, ranges, washers, ironers, sweepers, and similar appliances, had a total assessed valuation of \$23,796,940 for 1947 as compared to \$15,674,434 in 1946, it is reported by State Tax Commissioner Robert Armstrong.

Part of the increase is accounted for by greater availability of appliances and consequent buying of new appliances by Nebraskans during the past year, he said, but more stringent assessment methods also have figured in the increase.

Recent expansion of rural electrification lines has played an important part in the increased valuation of electrical appliances, it was indicated.

You can turn a shaft by foot



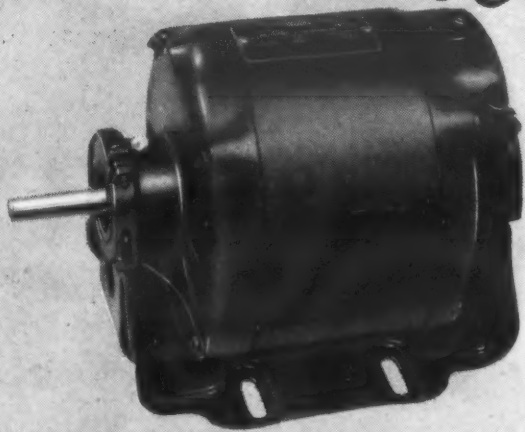
BUT IT'S BETTER TO USE YOUR HEAD

Appliance manufacturers know that Delco motors are an intelligent choice to "turn a shaft" in their products. Delco motor dependability has been proved over the years on leading makes of refrigerators, washers, ironers, stokers, oil burners, air conditioners and other appliances.

This fine performance record has won the complete confidence of appliance users and appliance dealers. The name "DELCO" on a motor assures them of sound engineering, quality materials, honest craftsmanship.

For a compact "power package" that meets specific requirements of torque and duty, you can't beat Delco motors. They are built in sizes from 1/8 h.p. to 50 h.p. Delco Products Division, General Motors Corporation, Dayton, Ohio.

Specify DELCO MOTORS



DELCO MOTORS  
Power America's  
Leading Appliances



Hard to get items!



"CHECK VALVES" with Solder Fittings

ORDER BY PART NUMBER

For Tubing Size O.D.	Part No.	\$245 each
1/4"	C-2A	
5/16"	C-2B	
3/8"	C-2C	

### FLAPPERS

CONNECTING ROD FOR CROSLLEY \$140

### VANES

F1	WATSCO FLAPPER, for Westinghouse Unit	\$60 each
F2	**WATSCO SUCTION FLAPPER, for Sealed Units listed below	.60 each
F3	**WATSCO DISCHARGE FLAPPER, for Sealed Units listed below	.60 each
F4	WATSCO DISCHARGE FLAPPER, for General Electric D. R. Models	.35 each
F5	WATSCO FLAPPER, for Norge Rollator	.60 each
F6	WATSCO FLAPPER, for Norge Rollator	.20 each
F7	WATSCO FLAPPER, for Frigidaire Meter Miser	.35 each

SUCTION FLAPPER AND DISCHARGE FLAPPER MARKED \*\* FIT STEWART-WARNER, PHILCO, CHIEFTAN AND TECUMSEH UNITS

V1	WATSCO VANES, for Coldspot (set of 4)	\$1.00 set
V2	WATSCO VANES, for Coldspot (set of 4)	1.00 set
V3	WATSCO VANES, for Coldspot (set of 4)	1.00 set
V4	WATSCO VANES, for Coldspot (set of 4)	1.00 set
V10	WATSCO VANES (TONGUE & HOLE), TYPE, for Norge Rollator	2.50 each
V11	WATSCO VANES (TONGUE TYPE), for Norge Rollator	2.50 each
V12	WATSCO VANES (GROOVED TYPE), for Norge Rollator	2.50 each

OTHER ITEMS NOW AVAILABLE. IF YOUR JOBBER CANNOT SUPPLY YOU, ORDER DIRECT.

SEND FOR OUR COMPLETE DESCRIPTIVE CIRCULAR AND PRICE LIST

WAGNER TOOL & SUPPLY CORP.

1302-43rd AVENUE, DEPT. EE, LONG ISLAND CITY, NEW YORK



The  
**KEY** to AIR CONDITIONING  
by James J. LaSalvia

Typical Condensing Unit for Air Conditioning

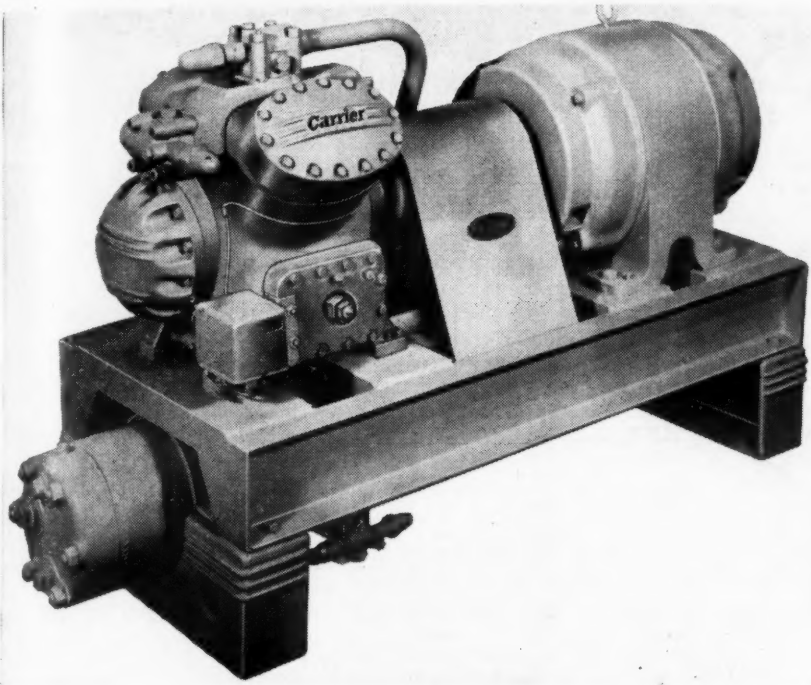


Fig. 3—The smaller size condensing units employed in air conditioning applications usually mount the compressor and condenser on the same frame as shown by this water-cooled Carrier Corp. unit.

### Refrigeration Cycle (Cont.)

Compressor and condenser are usually placed on the same frame on smaller compressor sizes (see Fig. 3), but on larger sizes, the condenser may be separate from the compressor.

Compressors should be selected for no more than 10% above the actual heat gain load, if the heat gain is properly figured. The compressor and cooling coil should be selected so that they will both balance with the heat gain as closely as possible in order to operate at the temperature chosen.

If the compressor is too small for the load and the cooling coil has been selected properly, the cooling coil will operate at a higher temperature than chosen, and the space will not be brought down in temperature as designed.

If the compressor is selected too large, and the cooling coil has been selected properly, the cooling coil will operate at a lower temperature than chosen. While this may work properly under high outside temperature, it may cause trouble under low outside temperature, if cooling is required, by icing the cooling coil. This means that ice will form on the cooling coil and prevent the air from passing through. This will generally occur when the coil is carried below 30° F.

In selecting a compressor the following information is required:

- Total B.t.u. per hour which must be supplied.
- Suction pressure or suction temperature at which compressor must operate.
- Condensing pressure or condensing temperature at which compressor must operate.
- Temperature and quantity of water for condensing purposes per hour.

e. Kilowatts per hour input.

Where a compressor is connected directly to a cooling coil, otherwise known as direct expansion, it is good practice not to operate the compressor lower than 30 lbs. and no higher than 48 lbs. gauge suction pressure.

It is also good practice not to operate below 95 lbs. and higher than 140 lbs. gauge condensing pressure.

#### WATER REQUIREMENTS

The temperature and quantity of water used for condensing purposes is a big factor for proper compressor operation.

The most important factors in this connection are:

- In using water for condensing purposes, it will require between 1 and 2 g.p.m. per ton of refrigeration.
- Water below 60° F. temperature should not be used for condensing purposes as it will generally cause the condensing pressure to fall below 95 lbs.
- When using water between 60° and 70° F. temperature for condensing purposes, it will require about 1 g.p.m. per ton of refrigeration, while water at 90° to 95° F. will require about 2 g.p.m. per ton of refrigeration. It is necessary to keep the water consumption down as low as possible in order to keep the operating cost as low as possible.
- The water pressure entering the condenser should not be lower than about 25 p.s.i. It must not be higher than 75 lbs. If higher than 75 lbs., use a pressure reducing valve to lower pressure below 75 lbs.
- Water-saving devices may be used instead of city or well water for condensing purposes.

(To Be Continued)

## ★ NUMBER SEVEN ★

### Long Pants

AIR CONDITIONING really began to grow up during the depression year of 1932. True, it did not bring the country out of the depression, as some optimists had predicted. Dollar volume did not double yearly, nor advance as fast as the miracle-forecasters expected. But during that time the industry did stimulate a long-term demand which has today assumed full acceptance proportions.

With the advent of war, and the WPB order limiting the sale of air conditioning equipment to essential users, the industry tucked away its plans for mass production against the day when a meteoric expansion could be capped with an appropriate climax.

Okay. The "shooting war" is over for the moment, and government restrictions have been abandoned. What now? Well . . . we can say this:

Predictions as to the real future of this potential industrial colossus range from high enthusiasm to cynical weariness. But: Air conditioning has an opportunity to test itself during the next three or four years.

Present backlog of commercial and industrial orders will keep the industry rolling for many, many months to come. On that we can count. And, by the time commercial and industrial demands have slowed up, manufacturers hope they can tap the still virgin field of residential air conditioning.

The real job of selling air conditioning to the public—the job which will intrigue specialty dealers—may begin when the industry begins to take its residential market seriously.

In the meantime, competition for patronage among retail stores, restaurants, theaters, beauty parlors, specialty stores, hotels, clubs, and other commercial establishments will give air conditioning the green light in the commercial field.

And in industry, as we shall note in future editions of this series, its usefulness is manifold. Air conditioning was first utilized, as a matter of fact, in a textile plant and in a print shop. From this initial industrial beginning, enterprising manufacturers went on to find more and more reasons why they should control the air, the heat, and the humidity in their factories. Today, this gestating new industry is eager to provide almost any kind of "indoor weather" in practically every type of structure or manufacturing operation. And it will.

But the biggest potential demand for air conditioning is in the home. And that market is still an unexploited field. When specialty dealers are evangelized into "having a go at" home air conditioning, the sky will be the limit.

This is one of a series of 26 advertisements dedicated to the progress of the entire air conditioning industry by

**PRINTER**

We are waiting for  
the **NEW KRAMER**  
**Refrigeration**  
**Catalog R-125**  
Write for yours today

**KRAMER TRENTON CO. Trenton, N. J.**

**NEVINGER MFG. CO., INC.**  
GREENVILLE, ILLINOIS



## Refrigeration Problems

### And Their Solution

By P. B. Reed

For Service and Installation Engineers



Manager, Refrigeration and Air Conditioning Division, Perflex Corp.

### The Oil Cycle (5)

Let us consider what effect the refrigerant in the oil has on the oil, especially its viscosity.

#### EFFECT OF REFRIGERANT ON OIL VISCOSITY

Fig. 4 shows the effect on 320 viscosity oil of various percentages of methyl chloride. The viscosity of the oil is affected by temperature so, for example, let us take the oil at 100°, the temperature at which its viscosity is standardized. If there is no methyl in the oil, then at 100° the viscosity is 320 (the point where the 0% curve crosses the 100° vertical line).

Keeping the oil at the same temperature of 100°, see what happens to the viscosity if the oil absorbs a small amount of methyl—enough that the mixture is 95% oil and only 5% methyl. We may be surprised to find that the viscosity has dropped to 130, a loss of over one-half of the original viscosity because of the "thinning out" effect of the comparatively small, 5% methyl mixed into the oil.

If the oil absorbs some more

methyl so that the mixture is now 90% oil and 10% methyl the viscosity has dropped to 75. A mixture of 85% oil, originally of 320 viscosity and 15% methyl results in a viscosity of less than 50 seconds.

Just how low the viscosity can go depends upon the type and design of the equipment, but it certainly seems reasonable to conclude that:

1. It is desirable to keep the refrigerant out of the oil, for a small amount causes a sharp reduction in viscosity, and consequently in lubricating ability.

2. If there is to be some refrigerant absorbed into the oil—and we will later find that it is scarcely avoidable to have some refrigerant in the oil in the crankcase—we must start out with an oil of rather high viscosity, higher than would be necessary if it were to remain undiluted with refrigerant, in order to still have enough viscosity left after some dilution, to give sufficient lubrication.

#### HOW LOW VISCOSITY?

Just how low the viscosity can go is perhaps debatable and depends to some extent on the design of the equipment and the application, but certainly, below 50 or 75 viscosity would be unsafe.

Experience indicates that 300 viscosity oil or even greater is necessary, and that it gives good results with such oil-miscible refrigerants as methyl chloride and "Freon-12."

Fig. 5 shows the effect of absorption of "Freon-12" into 325 viscosity oil. Five per cent "Freon-12" and 95% oil at 100° has a viscosity of about 193. At 10% "Freon-12" the viscosity is 120.

Thus, the absorption of "Freon-12" into the oil lowers the viscosity in the same manner as methyl chloride does. However, the same percentage of refrigerant in the oil reduces the viscosity less than in the case of methyl chloride. This is about offset by the fact that, under the same pressure and oil-temperature conditions, the oil absorbs more "Freon-12" than methyl chloride so the over-all effect on viscosity is about the same.

From Figs. 5 and 6 it will be observed also that the temperature of the oil affects its viscosity; the lower the oil temperature, the higher its viscosity if the amount of refrigerant in it remains the same; warming the oil lowers its viscosity.

On the other hand we will remember from Figs. 2 and 3 that a colder oil absorbs more refrigerant, which

(Continued on next page)

Fig. 4—How Methyl Affects Viscosity of Oil

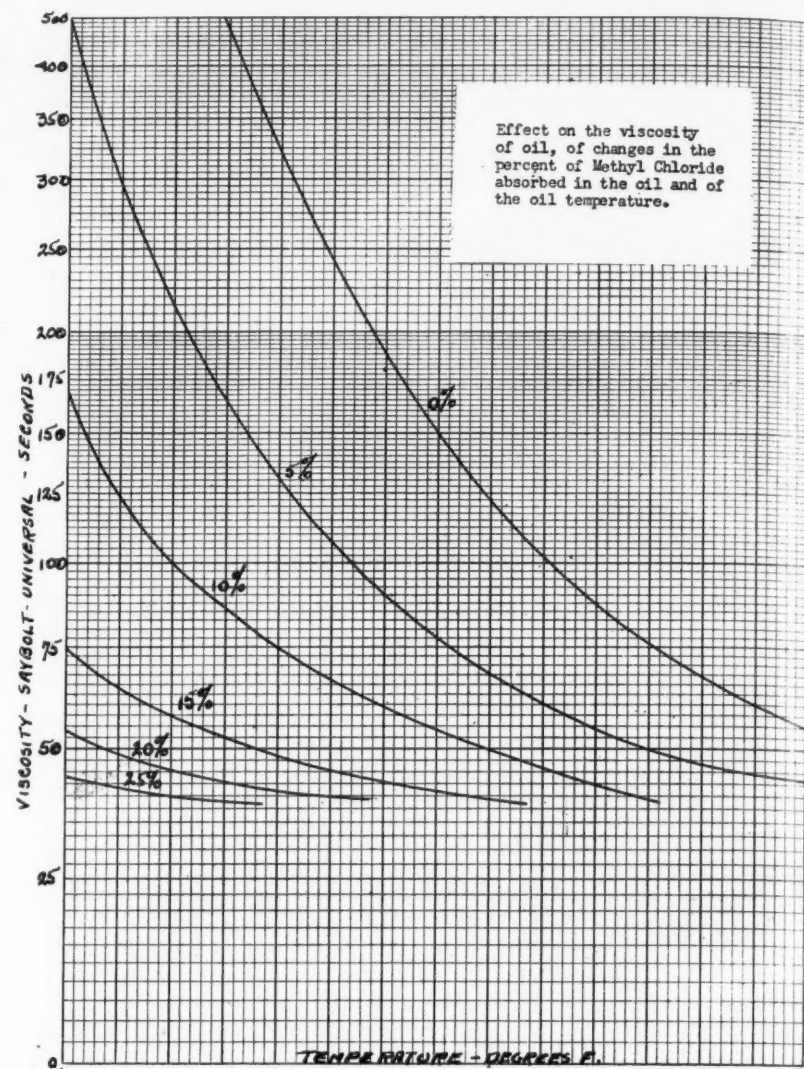


Fig. 4—Curves on this chart show how the viscosity of oil used in refrigeration systems is affected by variations in the percentage of methyl chloride absorbed in the oil, and by variations in temperature.

Fig. 5—How 'Freon-12' Affects Viscosity of Oil

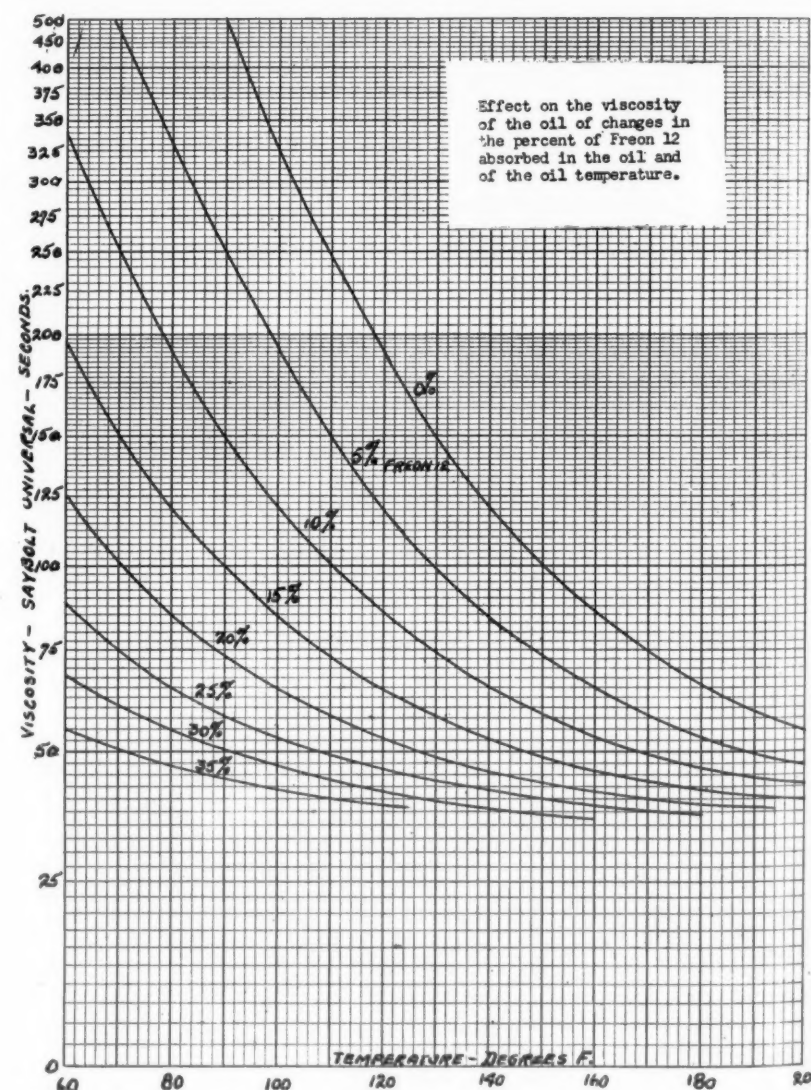


Fig. 5—Curves on this chart show how the viscosity of oil used in refrigeration systems is affected by variations in the percentage of "Freon-12" absorbed in the oil, and by variations in temperature.



Just ONE DROP of water

may mean a needless service call

A SINGLE DROP OF WATER could—and often does—freeze solid in the expansion valve, knocking out the system and making necessary a time-consuming purging operation. Sometimes food supplies are endangered, too... but always there's the inconvenience of suspended service.

Of course, there are a number of ways that excessive moisture can get into a refrigeration system... but installing Anaconda Refrigeration Tubes is *not* one of them.



Anaconda Refrigeration Tubes are made of 99.9% pure,

specially deoxidized copper, with a degree of "dryness" exceeding even the rigid requirements of A.S.T.M. Specification B68. The exclusive Anaconda Cup Seal\* on both ends protects the bright, clean, dry interior right to the point of installation.

These uniformly soft tubes are readily bent and flared. Available in all standard sizes up to and including 3/4" O.D. in 50-foot coils. Longer lengths on special order. Next time ask for them by name.

OTHER PRODUCTS: Precision-made tubes in Copper, Brass, Bronze and Copper-Nickel Alloys; from .015" O.D. to 1" O.D. with wall thickness down to .004"; round, square, or irregularly shaped; in coils, straight lengths or special forms. Bourdon tubes, thermal expansion bulbs.

THE AMERICAN BRASS COMPANY—FRENCH SMALL TUBE BRANCH

General Offices: Waterbury 88, Conn. • Subsidiary of Anaconda Copper Mining Company

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Anaconda Refrigeration Tubes

Freon Condensers • Dry-Ex Water Chillers  
• Evaporative Condensers • Forced Con-  
vection Units • Oil Separators • Liquid  
Receivers • Heat Exchangers • Pipe  
Coils • Hi-Peak Water Coolers • Flooded  
Water Coolers • Ammonia Condensers.  
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651 Mechanic St., Jackson, Mich.  
Offices in principal cities



## Oil & Refrigerant--

(Continued from preceding page)  
would thus tend to lower the viscosity and, therefore, tend to offset the increase of viscosity of the oil due to its becoming colder.

We have observed the effect of pressure and temperature on the amount of two of the oil-miscible refrigerants, methyl chloride and "Freon-12," that will be absorbed into mineral oil of the type generally used with those refrigerants. Also we have observed what effect the presence of these refrigerants has on the oils, especially on their viscosity.

### EFFECT ON THE REFRIGERANT

In some parts of the system, oil-refrigerant mixtures are mostly oil with some refrigerant absorbed in them. This is normally true in the compressor crankcase and our study of the effect of refrigerant in the oil is of special significance in that part of the system.

In the evaporator the oil-refrigerant mixture is mostly refrigerant with some oil in it. There, we are less concerned with the effect of the refrigerant on the oil than we are of the effect of the oil on the refrigerant.

What effect does the oil in the refrigerant in the evaporator have on the refrigerant? Does it increase or decrease the heat transfer between the refrigerant and the evaporator, and does it affect the boiling point of the refrigerant?

### OIL LOWERS HEAT TRANSFER RATE

It is generally agreed that oil in the refrigerant in the evaporator does little, if any good and could very well be dispensed with; that the rate at which the refrigerant can take up heat from the evaporator is slowed down by oil in the refrigerant.

To the writer's knowledge there is no quantitative data on this subject, but it is true that the more oil there is in the refrigerant the slower is the rate of heat transfer from the evaporator to the refrigerant within the evaporator.

Another subject in which we are interested is, what effect and how much, has the presence of oil in the refrigerant in the evaporator on the boiling point of the refrigerant?

Fig. 6 shows several curves. The bottom one, labeled 0, is the normal pressure-temperature curve for pure "Freon-12." It shows that at 0 pounds

per square inch gauge, "Freon-12" boils at about -22°; at 10 p.s.i.g. it boils at slightly over 1°, and so on.

If instead of pure "Freon-12" in the evaporator there is 90% "Freon-12" and 10% oil (of 150 seconds viscosity) the boiling point is raised about 1½° at 0 p.s.i.g. so that the boiling point is about -20½° instead of -22°. At 10 p.s.i.g. the boiling is now 2½° instead of a little over 1°, the increase in the boiling becoming proportionately higher the higher the pressure.

A mixture of 80% "Freon-12" and 20% oil boils at 4° at 10 p.s.i.g. instead of at 1° for straight "Freon-12," and at 20 p.s.i.g. it boils at 21½° instead of at 18° for oil less refrigerant.

Fig. 6 was based on "Freon-12" and 150 viscosity oil but there would be very little difference in the results if 300 to 325 viscosity oil had been used instead.

For the liquid "Refrigerant" to be 10% oil and 90% refrigerant is quite common and for it to be only 80% refrigerant and 20% oil is not uncommon under normal conditions. This means, then, in an evaporator using "Freon-12," that if the pressure is 20 p.s.i.g. the refrigerant is supposed to be boiling at 18½° but if it is 10% oil it is boiling at 19½°, that is 1½° higher than the pressure-temperature chart for pure "Freon-12" indicates. If it is 20% oil the boiling temperature is 21½° which is 3½° warmer than is to be expected.

These are "normal" conditions, and not uncommon. If there is an abnormal amount of oil in the evaporator, say 30%, the evaporator temperature is 23½°.

If the evaporator is "oil-logged" with as much as 50% of the "refrigerant" being oil then its boiling point is 29½°, or 11½° above what it should be if it were oilless "Freon-12."

### OIL RAISES BOILING POINT

The presence of the oil in the refrigerant causes the evaporator temperature to be above normal but the compressor is still working on 20 p.s.i.g. and not at the higher suction pressure that would be normal for the higher temperatures. Therefore, the compressor is not working at the capacity and efficiency that it should be working at for that evaporator temperature.

In this study of the effect on the boiling point of the presence of oil in the refrigerant, "Freon-12" has been used as the example but a similar condition would be true of other

oil-miscible refrigerants although not necessarily in the same proportions.

We have already seen that the presence of oil in the evaporator lessens the rate of heat transfer. Now we see that by raising the boiling point of the refrigerant, oil in the refrigerant in the evaporator lowers the compressor capacity and efficiency.

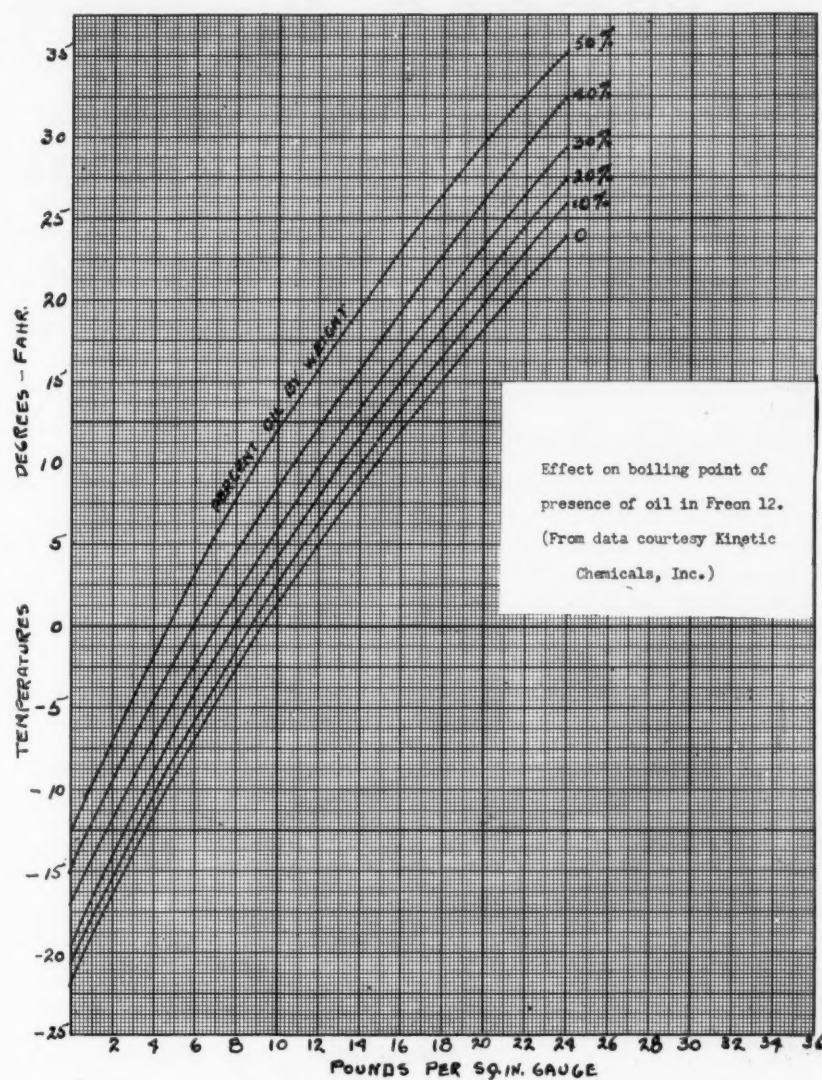
From this it appears obvious that there should be as little oil in the evaporator as possible.

A small amount of oil in the refrigerant, even up to 10% probably does so little harm that it is insignificant for ordinary, practical purposes, except in some ultra-low temperature applications where the amount of space in the cabinet for evaporator is so limited that every square foot must work at its best efficiency, and where a slight difference in suction pressure means a marked difference in compressor capacity and efficiency.

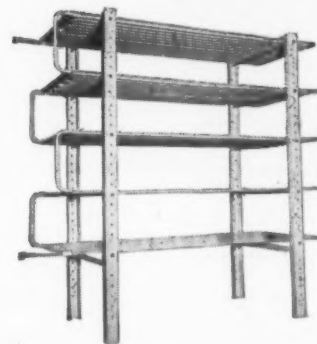
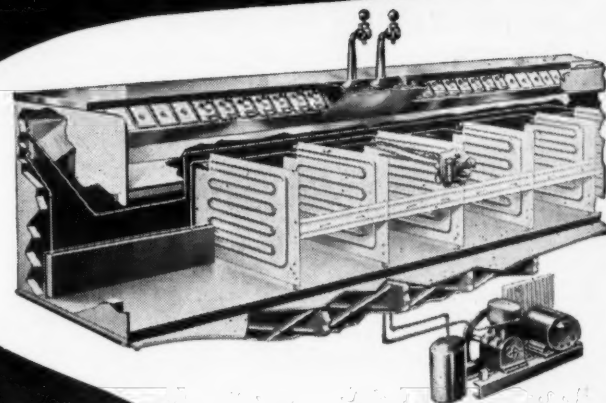
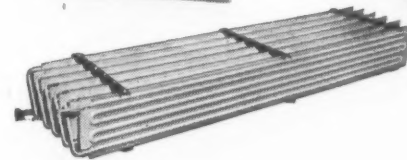
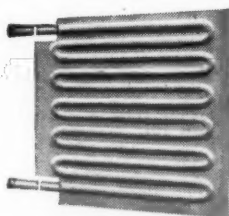
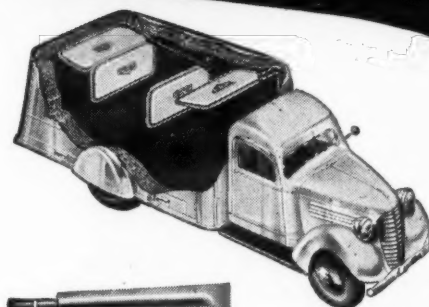
On such installations it may be advisable to take special precautions to reduce to the very minimum the amount of oil in the evaporator by: 1. keeping to the minimum the amount of oil in the refrigerant to the evaporator; 2. designing the evaporator, with special attention to keeping a good velocity of the refrigerant in the evaporator so as to keep the oil moving on through the tube and thus prevent the evaporator from "oil-logging," that is, prevent the percentage of oil in the refrigerant in the evaporator from increasing.

Next week we will trace the oil and refrigerant mixtures through the system and see what effect the pressure and temperature changes have in the actual action within the system.

Fig. 6—Effect of Oil on Boiling Point of 'Freon-12'



## This KOLD-HOLD Principle



applied in  
these products

means **PROFITS** for you

KOLD-HOLD "Quick Action" Serpentine Plates have a multitude of applications . . . all profitable to the user. Used to equip new installations, or to convert out-dated ones . . . used separately, in banks, plate stands, or as cabinet liners, they assure you the following advantages:

1. Easy installation.
2. Maximum prime surface.
3. Highest rate of plate heat acceptance.
4. No possibility of short circuiting the flow of refrigerant, which flows in one continuous pass from inlet to outlet.
5. Oil logging positively prevented.
6. Minimum pressure drop.
7. Tested under pressure.
8. An appreciably higher "K" factor.
9. Thoroughly cleaned and dehydrated.

**KOLD-HOLD**

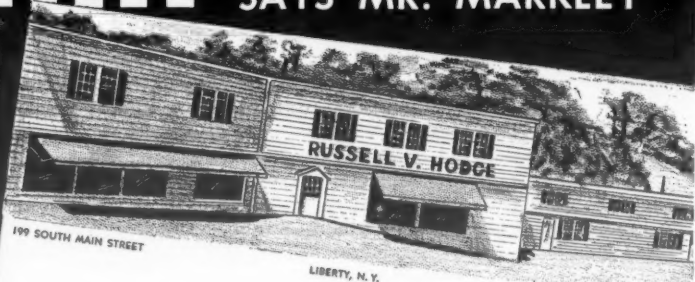
Jobbers in Principal Cities

PROCESSING. TRANSPORTATION.  
protects every step of the way

STORAGE

KOLD-HOLD MANUFACTURING COMPANY - 500 E. HAZEL ST., LANSING 4, MICHIGAN

"We are using  
nothing but Thawzone"  
SAYS MR. MARKLEY



199 SOUTH MAIN STREET  
LIBERTY, N. Y. TELEPHONE LIBERTY 1

September 20, 1947  
Highside Chemicals Company  
195 Verona Avenue  
Newark 4, New Jersey

Gentlemen:

During the past 6 years most of my time has been devoted to the designing and engineering of low temperature refrigeration equipment, from 4 cubic feet cabinets to locker plants. The stiffest problem was the prevention of moisture freezing up the expansion valve. When evaporative temperatures of minus 15 to minus 25 degrees Fahrenheit are maintained, the least trace of moisture causes trouble with expansion valves. We had used various types of drying agents, but found that even Silica-Gel was far from 100 per cent satisfactory. Often, we had to go back to the job several times to replace the drier before finally eliminating the moisture. Almost invariably, if a change of refrigerant had to be put in, additional driers were necessary. Finally, we spent a large amount of time and money developing capillary tubes to replace expansion valves.

Then we learned that quite a number of our dealers were using Thawzone and eliminating expansion valve freeze-ups. I am now with a company doing a large volume of commercial refrigeration business, probably 75 per cent of which is low temperature installations. We are using nothing but Thawzone in all our applications.

Very truly yours,

HODGE'S

Richard Markley, Jr.  
Richard Markley, Jr.

ALSO  
MAKERS OF  
**TRACE**  
REFRIGERANT  
LEAK DETECTOR

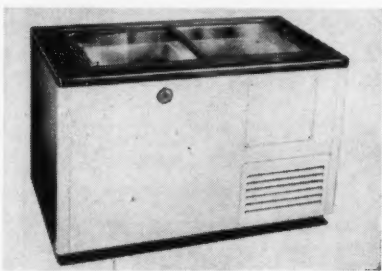
**HIGHSIDE CHEMICALS COMPANY**  
195 VERONA AVE., NEWARK 4, N. J.

**THAWZONE**  
PATENTED  
The PIONEER FLUID DEHYDRANT



## What's New

### New Ace Sliding Door Cabinet In 3 Sizes



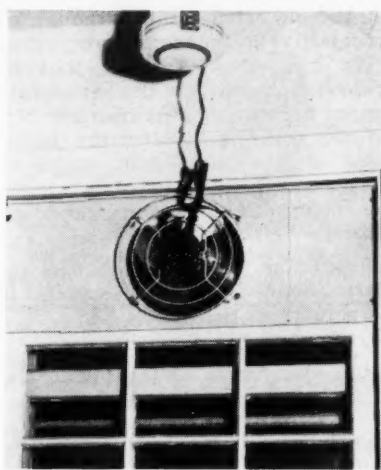
This sliding door cabinet, manufactured by Ace Cabinet Corp., is available in three sizes. The 10-cu. ft. model has a 1/4-hp. condensing unit; the 15-cu. ft. model a 1/2-hp. unit; and the 20-cu. ft. cabinet a 3/4-hp. unit.

### 'X-Pelzit' Can Remove Stale Air at 600 C.f.m.

TAKOMA PARK, Md.—Thompson & Bishop here is marketing a new air expeller designed for window mounting and referred to as the "X-Pelzit." It is claimed to remove hot, stale air and odors from a room at the rate of 600 c.f.m.

Its 10-in. aluminum blades are powered by a 110 volt, 60 cycle a.c., shaded pole induction motor rated at 1,500 r.p.m. A safety guard is provided at the fan opening, and the motor, which the company says is equipped with a 6-ft. cord, will not cause radio interference.

Motor and blades are on an all aluminum frame with aluminum sliding side panels, which allow mounting in windows ranging from 22 in. to 33 in. in width. Installation is accomplished, according to the



Thompson & Bishop "X-Pelzit."

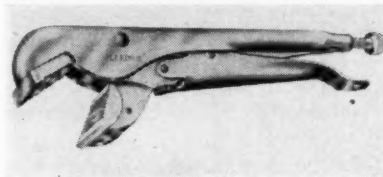
company, by fastening the unit to the top of a kitchen window frame or the bottom of the sash in other rooms. When the fan is mounted in the top window frame, it is claimed that the window may be closed without removing the unit.

Framework and panel are finished in ivory tone baked-on enamel. Retail price of the X-Pelzit fan is \$13.95.

on an insulated plug, these systems consist of compressor, blower coil, thermostatic control, vibration fittings, condenser and receiver, and expansion valve, according to the manufacturer.

This line, designed for standard temperature ranges with adjustable temperature controls, is available in 1/2 and 1-hp. sizes, with 1 1/2 and 2-hp. units to go into production soon, the company reports. Eventually the line will include three sizes of low temperature models with automatic defrost.

The systems are basically designed for use in Reco Fab coolers and are shipped ready to be installed and connected to service line.



### 'Pli-rench' Self-Aligning Jaw Has over 1-Ton Grip

NEW YORK CITY—Whale Tool Corp., 1767 Broadway here is manufacturing a new Whale Pli-rench, which features self-aligning jaw, said to be a basic improvement in power locking type wrenches.

A full jaw length grip on straight or angular objects is claimed to be a certainty because of the action of the self-aligning jaw. A better than one-ton grip is provided by the simple locking arrangement, which frees the hands.

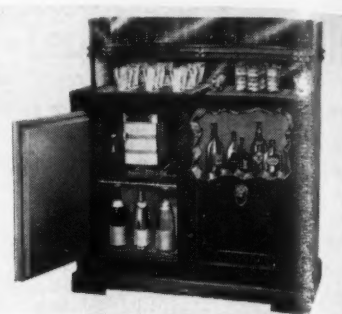
Jaws are made of heat treated drop forgings, with machine milled teeth, and have an electro-plated finish.

The tool is recommended for use as a wrench, clamp, vice, or pliers in the home, factory, or service shop.

### Camouflaged Refrigerated Bar Conceals Compartment

NEW YORK CITY—"Consol-ette," a new "camouflaged" refrigerated bar for home and office, is now available through dealers of Refrigerated Equipment Sales here, the company announced.

Measuring 42 x 42 x 18 in. and

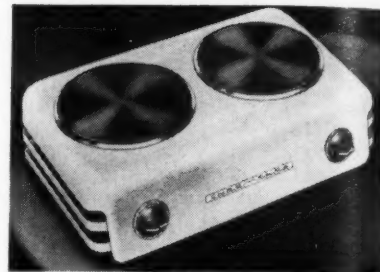


Refrigerated Equipment "Consol-ette."

weighing approximately 200 lbs., the bar contains 3 1/2-cu. ft. of refrigerated space and includes an ice-cube maker. It also contains a concealed compartment for liquor storage, with an automatic switch-off light, and a mirrored service section at the top for glasses, mixers, etc.

No special installation is needed, according to the company. The bar is said to plug into any a.c. outlet (d. c. available on request) and to be movable.

Interior of the "Consol-ette" is completely concealed by the cabinet, which can be locked.



### Spillovers Will Not Harm Wiegand Burner Plates

PITTSBURGH—Edwin L. Wiegand Co. here has introduced a new Chromalox double unit hot plate, said to be ideal for use in small homes, diet kitchens, camps, etc.

Described by the manufacturer as a two unit electric range, the plate uses Chromalox Heatflo units, the cooking surfaces of which are unharmed by spillovers. An even distribution of heat, and ease in cleaning are cited as outstanding features of the two unit plate which is similar to the one burner model introduced previously.

*This Could Be  
YOUR DOOR!*



## —Right in Your Own City!

Here is an exceptional profit-opportunity for you if you are able to qualify—provided we have no sales and service representative in your area. We are seeking adequately financed individuals or organizations who have experience in the air conditioning and commercial refrigeration fields. Personal integrity, enthusiasm, energy and a spirit of co-operative effort are factors which will count heavily, as well as a basic knowledge of the market we would like to reach . . . and the various applications to which our products can be put. LIPMAN Machines are built in sizes from 1/4 to 40 horsepower, placing at your disposal equipment that is suited to meet all requirements . . . and designed to use Ammonia, Methyl-Chloride or Freon refrigerants.

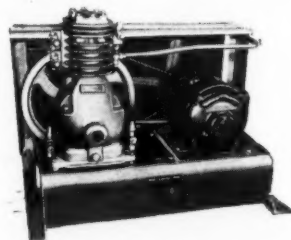
You can depend on—



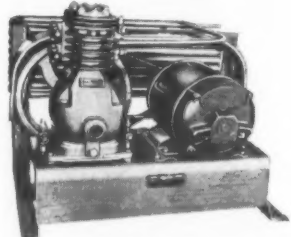
LIPMAN Refrigerating Machines are the products of top-engineering, combined with finest materials that money can buy and precision-checked workmanship.

Depend on LIPMAN for colder "Frost-Bite" temperatures . . . held to a steady, uniform level, to provide accurately regulated and sustained refrigeration to meet every commercial and industrial requirement.

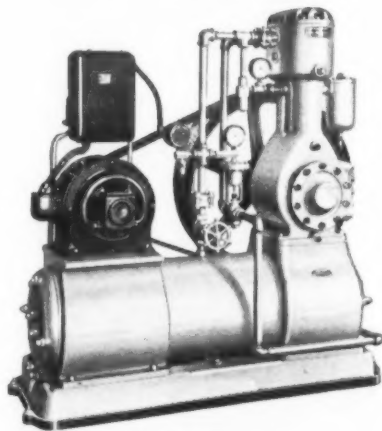
Inquiries are invited . . . write for additional information on our sales and service plan.



Model 152  
1 1/2 H.P. Air-Cooled Unit



Model 153  
1 1/2 H.P. Water-Cooled Unit



Model 1110  
10 H.P. Ammonia Unit



**GENERAL REFRIGERATION  
DIVISION**

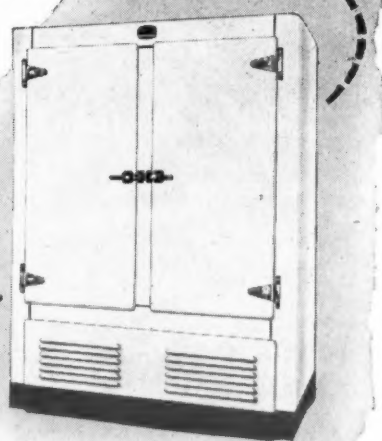
YATES-AMERICAN MACHINE CO., Beloit, Wisconsin

## ASSURED PERFORMANCE

### in Reach-in Refrigerators

Recognized as quality products SHERER

Reach-in Refrigerators will continue to be built to the same high standards that have earned them their present outstanding position in the industry.



One member of a complete quality line . . . designed to be salable in volume at a profit.

VEGETAIRES • DAIRY CASES • REACH-IN

REFRIGERATORS • WALK-IN COOLING ROOMS •

MEAT & DELICATESSEN DISPLAY CASES •

## ✓ CHECK WITH Ranco FIRST

Specialists in Refrigeration	Less Stock to Carry
More Ranco Controls in Use	✓ Greater Customer Satisfaction
Dependability	More Profit For You



### You'll Make Fewer Call-Backs

One service call is all you need to make on any job, if you work with Ranco Refrigeration Controls. Ranco Controls, designed for dependability and built for trouble-free service, insure the satisfactory performance that pleases customers. Replace with Ranco Controls and eliminate those time-consuming call-backs that cut into your profits. Your Ranco wholesaler will gladly furnish complete information on any Ranco Refrigeration Control, or you can write direct to Ranco Inc.

The Ranco O-1414 and O-1477 Controls are designed for milk cooler use where the temperature at the control, or on the capillary tube, may at times be lower than the controlling bulb temperature.

**Ranco Inc.**  
COLUMBUS 1, OHIO



World's Largest Manufacturers of REFRIGERATION CONTROLS



## What's New (Cont.)

### First '48 Hotpoint Range Has More Cooking Space



tom heating unit concealed beneath the oven lining to give oven capacity great enough to cook a complete meal for 10 persons at one time, he added. Temperature, automatically controlled, ranges from 150 to 550° F.

The Calrod heating unit is smaller in actual cooking area, but the increased turns of tubing give increased heat and flexibility, he claimed. Surface cooking units have five different heats.

Like the 1947 models, the new range will have a 7-qt. cooker whose heating unit can be raised from its well to act as a fourth surface unit, automatic lights to show heat position on top units, automatic white oven signal light, fluorescent light in the backplaster, a broiler designed for speedy cookery, a warmer drawer, and large storage drawers.

Two economy models in the new line will also have the sealed heat oven, improved heating units, and porcelain enamel exteriors with bright metal trim.

CHICAGO—First of Hotpoint's 1948 model electric ranges, featuring a sealed heat oven, faster heating and cooling action, and new trim streamlining, is now being shipped to dealers. L. C. Truesdell, vice president in charge of marketing, has announced.

Completely automatic, the new "Masterpiece" model provides 33% more surface cooking capacity, and has newly designed Calrod coils, Mr. Truesdell said.

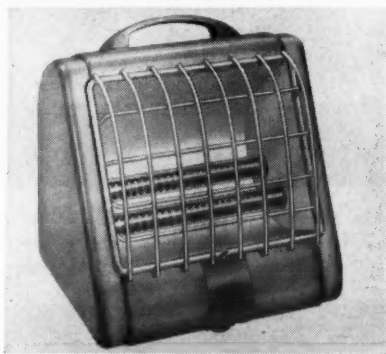
The sealed heat oven has the bot-

### Chrome Elements of Space Heater Enclosed In Pyrex

ERIE, Pa.—Patented nickel chrome elements enclosed in Pyrex tubes feature the new electric space heater introduced by Swanson Tool & Machine Products, Inc., here.

This feature of the Swanson Pyr-O-Tube heater, as the unit is called, gives out a quick and lasting heat, according to Swanson.

The heater measures 16 in. high, 13 in. wide, and 12 in. long. It is equipped with a handle for carrying, a stainless steel reflector and a grille which can be removed by releasing



Swanson Pyr-O-Tube Heater.

one thumb screw. The finish is a neutral gray.



### New Low Priced Wringer Washer Turned Out by G-E

BRIDGEPORT, Conn.—A new lower priced General Electric wringer washer is now in production, states C. E. Anderson, manager of the company's home laundry equipment division, who also said that G-E's present wringer washer, model AW-332, will be equipped with a built-in timer.

The new washer, designated the AW-132, carries a recommended national retail price of \$129.75, while the AW-332 will retail at \$149.75.

Although similar to the AW-332, the new machine does not have the one-control wringer and timer found in the older model, Mr. Anderson said. Forward or backward motion of the wringer is controlled through a knob mounted on the side of the wringer post, while a safety bar

above the wringer rolls provides an emergency release.

A full-length, to-the-floor skirt conceals the washer's mechanism and pump. The porcelain enameled, or aluminum self-draining tub holds eight pounds of dry clothes and is mounted on a rubber gasket to absorb vibration.

An aluminum alloy activator and a friction-driven pump to empty the tub are standard equipment.

The washer is driven by a rubber-mounted ¼-hp. motor and "Perma-drive" mechanism.

The new timer on the AW-332 can be set to control the washer's agitation action for any period up to 15 minutes. The timer controls are built into the washer's skirt just below the tub's chrome trim band and include a "hold" position which allows for manual operation of the appliance for longer washing periods.

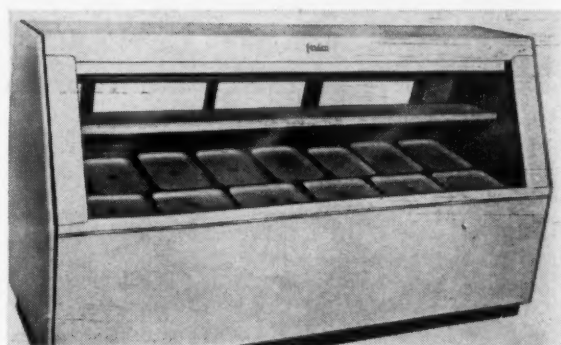
### Dealers Get Jordan Sample P-50 Display Cases

PHILADELPHIA—Floor samples of Jordan Refrigerator Co.'s new Model P-50 double duty display case, said to enable better display, are now on their way to dealers, according to a company announcement.

A part of Jordan's 1948 line of newly-designed refrigerators, the case will be available in 8 and 10-ft. models. It is finished in a porcelain exterior and a stainless steel interior. A full-length porcelain mezzanine shelf and fluorescent lighting system are included as standard equipment on the units.

"Clear perfect vision into every part of the display section is assured by the non-glare angle of the 'Thermopane' display glass," the announcement said. "The same triple-thick glass is also used in the sliding service doors in the rear of the case—thus giving clear vision into the interior display section without opening doors."

"Better display is also made possible through the use of the Jordan



'Moist-Cold' cooling system which prevents foods from drying out and losing original color."

Other new and improved models will be announced between now and the end of the year, when an entirely new Jordan line will be available and on display at the 5th All-Industry Exposition, the company announcement reported.

It said the 1948 line will be comprised of many new models, including self-service display cases, wall and dairy cases, reach-ins and walk-ins, beverage coolers, and a full line of frozen food display and storage freezers.

# COMPACT COOLING

FOR REACH-INS, BACK BAYS AND LOW CEILING WALK-INS

## McQuay

### PANEL TYPE CHILLATOR




Designed especially for small space applications, the restyled panel type Chillator is engineered for peak performance. The Ripple Fin Coil provides a more efficient transfer surface of superior strength and durability. Hydraulic expansion of the tubes into wide fins insures a permanent mechanical bond plus maximum fin to tube contact for high heat transfer efficiency. Also, the resulting ripple inner surface of the tube creates a turbulence of the refrigerant giving added capacity.

Other important details of the McQuay Chillator include drawn fan shroud; recessed fan and motor assembly, rigidly supported for smooth operation; functional die-formed cabinet with baked-on white enamel finish. Large Chillator models are equipped with heat exchangers. Write to McQuay now for Bulletin 92-P or contact your Refrigeration Wholesaler in your city.

**EASY TO INSTALL AND SERVICE**  
Keyhole mounting slots allow flush installation. Refrigerant and electrical lines can be connected either side through convenient knock-out plugs. Entire front panel removable without tools, for easy servicing.



## THE EVANS FULL VISION SHOW CASE



Model 6-H.R.

**SENSATIONAL VALUE for Immediate Delivery in 4-Ft., 5-Ft. and 6-Ft. Lengths.**

**COMPARE THESE FEATURES—**


- **TRIPLE** glass fronts guaranteed not to sweat or fog for five years.
- **WARP-PROOF HARD RUBBER** sliding doors and jambs in rear of case to save space (available with solid swinging doors on 4-Ft. case).
- **AUTOMATIC DRAINING SYSTEM** for a clean case.
- **MODERN DESIGN.** Utility adds to appearance Plus many other features.

The Full Vision Case is a case with many uses for Bakeries, Grocers, Dairies, Delicatessens, Restaurants, Wine Stores, and wherever a small refrigerated showcase is needed. It is an automatic salesman, that fully displays merchandise and "KEEPS IT COLD UNTIL IT'S SOLD."

For information write

**EVANS MANUFACTURING CORP.**  
460 SOUTH 10TH AVE.

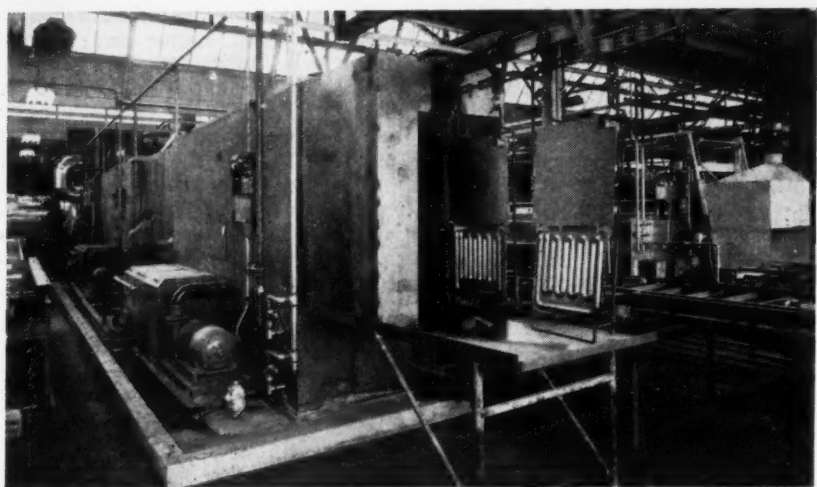
**MT. VERNON, N. Y.**



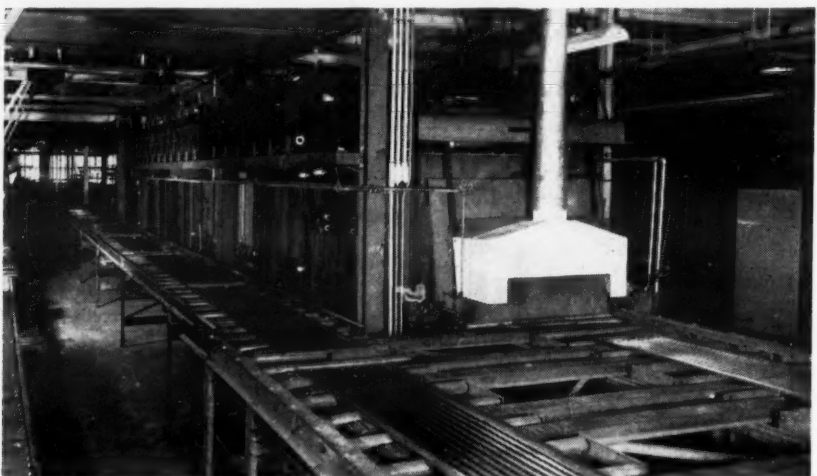
# McQuay

1007 Broadway Street, Northbrook, Illinois





Improved production methods for the manufacture of plate evaporators have been introduced by Kold-Hold Mfg. Co. in its new plant at Lansing, Mich. Before the plates go into the new brazing oven they are steam-cleaned in this cabinet.



Temperatures of 2,500° F. are maintained in a hydrogen atmosphere within this long oven at the Kold-Hold plant to braze both halves of a plate evaporator together. Thin copper strip between the plate is melted by the terrific heat to braze and seal the joints.

## Brazing Process Seals Kold-Hold Plates

LANSING, Mich.—As an important part of the new production processes which Kold-Hold Mfg. Co. has introduced at its new plant here, a new hydrogen brazing process has been inaugurated.

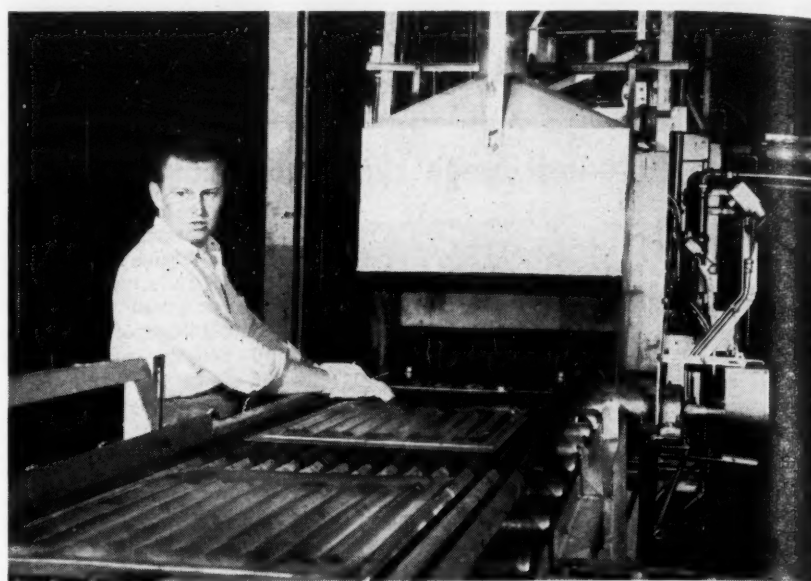
Claimed to be the first of its kind in the industrial refrigeration field, the brazing process assures a more perfect seal at all joints in the evaporator plate and the interior is kept free of all foreign substances.

Conveyor lines are used extensively in the factory to cut down handling and speed production. First step in Kold-Hold's new plate production process is the cleaning of surface plates before brazing in a steam cleaner. Next a flat sheet and a plate embossed with channels to provide for refrigerant flow are lined up with a thin copper sheet between.

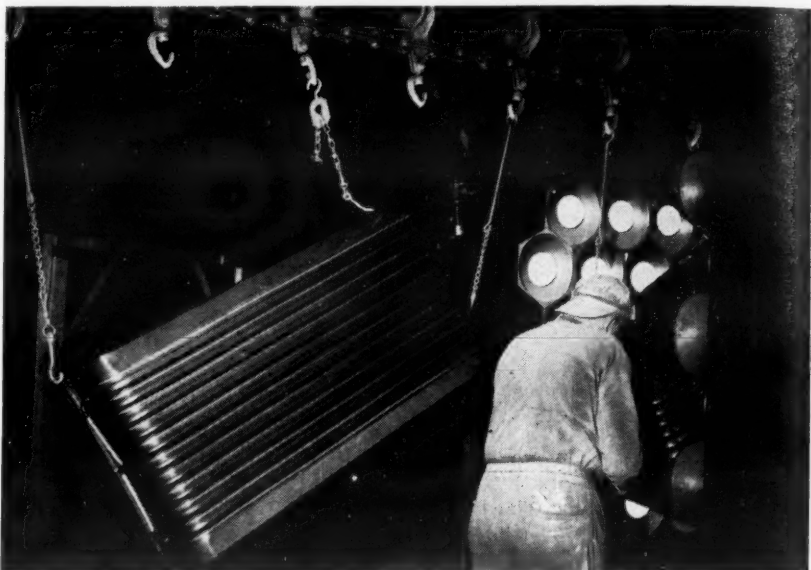
The 2,500° F. temperature in the brazing oven melts the copper sheet to make a perfect seal of every joint. The oven is filled with hydrogen gas, and to burn off all gases from the plate it passes over an open flame just after entering the oven. The oven door is controlled by an electric eye to reduce heat loss.

From the brazing oven plates next travel to the bonderizing cabinet where surfaces are cleaned to make a better bond for the enamel finish.

After acid is washed from the plate surface it is dried by infrared lights, goes to the spray booth, and in the final step, the enamel is baked on in oven fitted with infrared lamps at 350° F.



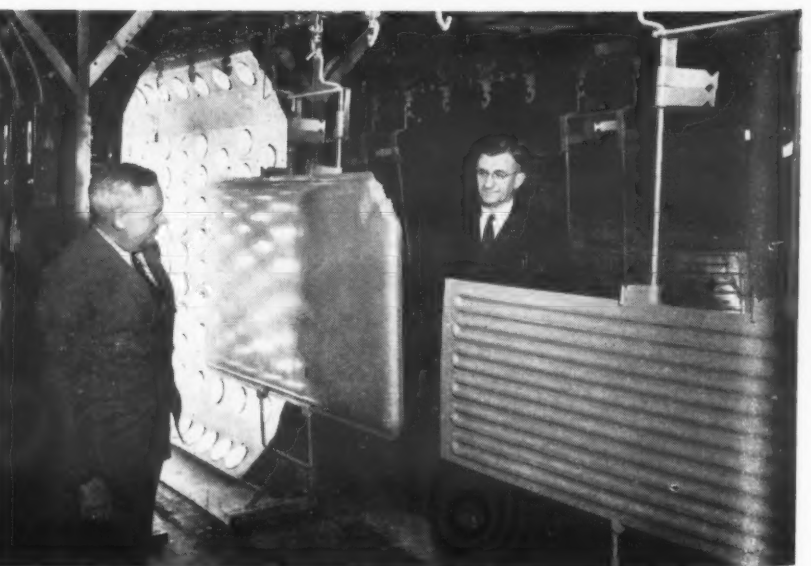
An electric eye automatically opens and closes the door to the brazing oven, and an open flame at the entrance burns off all gases from each plate. Surfaces of the plates are said to be completely free of moisture and foreign substances before they are bonded.



From the brazing ovens plates next travel to the bonderizing operation, and following the acid bath and subsequent wash, the plates or cabinet liners, like the above, move through a drying chamber containing a battery of infrared lights.



Painting of plates is performed in a spray booth before a curtain of running water which carries away harmful vapors and collects excess paint for re-use.



Final step in plate production at the Kold-Hold plant is the baking of the enamel, infrared lights at a temperature of 350° F. being employed.

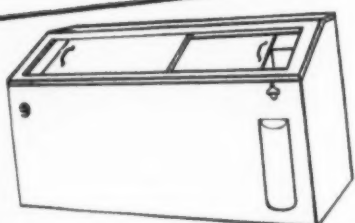
# NATIONAL

## Refrigerated SANDWICH and SALAD UNITS



MODEL R-502

48" long, 30" front to back, and 36" high. Model R-501 is the same with less pan space, 2 storage doors, 42" wide. Model R-500 is 36" wide, without toaster section.



DRY BEVERAGE COOLERS

... for beauty, endurance, and performance, specify National. Four popular sizes, featuring 3" insulation, black morocco finish with stainless-steel top and doors.

National offers three models of refrigerated salad units which are designed and built to serve the finest restaurants and open kitchens. Shown above is the new Model R-502, of all-metal construction. The front, top, roll cover, lining, and salad pans are of stainless steel. Other features include chrome hardware, heavy doors with gaskets, 2" insulation, double rows fin coils under pans, laminated cutting board, and electric plug. Back and sides in durable baked-on, grey wrinkle finish.

Send for illustrated circular and price list for National Restaurant and Bar Equipment. Prompt deliveries.

Manufacturers of Stainless Steel and Metal Restaurant Equipment  
**NATIONAL COOLER CORPORATION**  
1600 WOODLAND AVENUE • CLEVELAND 15, OHIO

GET THIS NEW

FALL AND WINTER  
**DEPENDABOOK** NO. 145

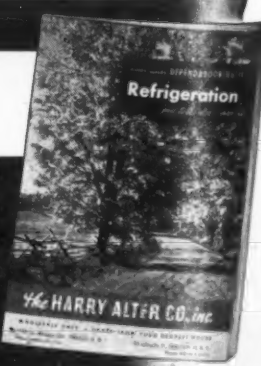
It's brand new, it's America's finest source for REFRIGERATION, AIR CONDITIONING and ELECTRIC MOTOR Parts and Supplies

Your copy is waiting for you. Write on YOUR letterhead, today to

**THE HARRY ALTER CO., INC.**

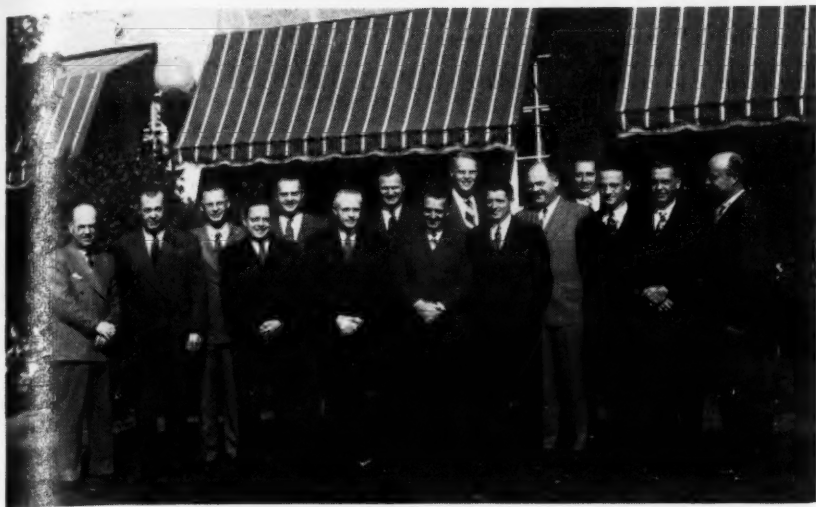
1728 S. Michigan Ave.,  
Chicago 16, Illinois

134 Lafayette Street  
New York 13, New York





## Committee Works On Condensing Unit Standards



The 15-man Industry Joint Engineering Committee which held its second meeting recently at Swampscott, Mass., to work on a set of minimum standards for open type condensing units up to and including 5 hp. are:

From left to right: Henry A. Brysselbout, chief engineer, York Corp.; Clyde Plaeger, Servel, Inc.; George R. Kingston, manager, commercial product development division, Nash-Kelvinator Corp.; A. B. Newton, chief engineer, electric refrigeration and air conditioning division, Chrysler Corp.; Carl Ehrenhardt, General Electric Co.; J. L. Gibson, manager, commercial and air conditioning engineering, Frigidaire division, General Motors Corp.; Ted Benson, also of Frigidaire; W. E. Landmesser, vice chairman, manager resale sales, York Corp.; Lars Hanson, director, reciprocating refrigeration division, Carrier Corp.; Leonard C. Bastian, recording secretary, Air Conditioning & Refrigerating Machinery Association; Oscar Buchman, vice president and chief engineer, Copeland Refrigeration Corp.; George Davis, Lynch Mfg. Co.; Alfred D. Sullivan, chief engineer, Brunner Mfg. Co.; Frank K. Smith, chairman, sales manager, refrigeration division, Tecumseh Products Co.; and Mark E. Mooney, product manager, applied refrigeration, Carrier Corp.

Indications were that the standards could be completed and approved before the end of the year, following a third meeting that will probably be called later this month or early in December to put the standards into their final form.

## Department Store Sales For Nov. 1 Week Up 14%

WASHINGTON, D. C.—The Federal Reserve Board reported a 14% increase in nation-wide department store sales during the week ended Nov. 1, compared with the corresponding week a year ago.

Increases varied from 3% in the Boston district to 37% in the New York district. However, it was noted that in the case of New York, allowance should be made for the fact that last year there were work stoppages in the trucking industry.

Percentage increases in other districts were: Philadelphia, 10%; Cleveland, 7%; Richmond, 9%; Atlanta, 8%; Chicago, 12%; St. Louis, 20%; Kansas City, 17%; and Dallas, 21%.

Compared with like periods of 1946, department store sales were up 8% for the year to Nov. 1, up 7% for the four weeks ended Nov. 1, and up 7% for the week ended Oct. 25. As of Nov. 1, the weekly index without seasonal adjustment (1935-39 equals 100) stood at 315, compared with 277 at the corresponding time last year.

## Industrial Air Conditioning Firm Set Up In Los Angeles

LOS ANGELES—Industrial Air Conditioning, Inc. has been formed in Los Angeles County, with 900 shares of no par value capital stock. Directors are: Ivor Malone, Van Nuys, Calif.; Carlyle Artran, Los Angeles; and John Chester Malm, Pacific Palisades, Calif.

... for extra protection against leakage

**IMPERIAL Triple Seal FITTINGS**

... The Flare Fitting with the groove in the seat

When the flare is drawn against this groove the copper tubing is extruded into the groove making a tight, self-sealing joint. Here is the joint that remains leakproof even though the face of the seat may be nicked or marred. This extra seal of safety is a plus feature that costs no more. Included in all sizes 3/8" and larger.

**THE IMPERIAL BRASS MANUFACTURING COMPANY**  
565 South Racine Avenue • Chicago 7, Illinois

## Refrigeration - Air Conditioning - Heating - Parts and Supplies

Same Day Service—  
From Our Complete  
Stocks

A Copy of Our Latest  
Catalog Furnished on  
Request



26,000 sq. ft. of Store and Warehouse Space  
**THE SUPPLY HOUSE THAT SERVICE BUILT**

**SERVICE PARTS CO.** 2511 LAKE STREET  
MELROSE PARK, ILLINOIS

## STYLED FOR PERFORMANCE

Larkin refrigeration products, made by the originators of Cross Fin Coils, combine industrial beauty with flawless performance. Humi-Temp Forced Convection Units—Bare Tube and Zinc Fused Steel Plate Coils—Evaporative Condensers—Air Conditioning Units—Instantaneous Water Coolers—and other top-ranking factors in industrial and commercial refrigeration.



**LARKIN COILS** 519 MEMORIAL DRIVE • S.E.  
ATLANTA • GEORGIA

## Taylor, Kerr, DeCamp Get New Kelvinator Posts

DETROIT — Three important changes in Kelvinator field organization have recently been announced by Charles T. Lawson, vice president of Nash-Kelvinator Corp. in charge of Kelvinator sales.

C. D. Taylor has been appointed Atlanta zone manager succeeding C. R. Brogan who has become general manager of Refrigeration Discount Corp., a Nash-Kelvinator subsidiary. Taylor joined Kelvinator in 1936 and since 1943 has been New Orleans zone manager.

E. S. Kerr has been named New Orleans zone manager. Kerr, who has been Des Moines branch manager since 1945, joined Kelvinator in 1940.

W. E. DeCamp, who joined Kelvinator as district manager in the Chicago zone, has been appointed branch manager in Des Moines.

## Canadian Ambassador Takes Air Conditioners To Pakistan

TORONTO, Ont., Canada — The Hon. John B. Kearney, first Canadian Ambassador to Pakistan, has purchased six Carrier room air conditioners for the Canadian Embassy at Delhi.

## Noma Reports \$364,951 Net Profit for 6 Months

NEW YORK CITY—A net profit of \$364,951 for the six months ended June 30 has been reported by Noma Electric Corp. here. This is after deducting \$1,500,162 for expenses and losses on discontinued production of certain merchandise and inventory write-downs, according to the company. Net sales for the period were \$17,239,527.

No comparison to the comparable period of last year is available as the company recently changed its fiscal year to end June 30 instead of Dec. 31 as previously.

## Ace Cabinet 'Open House' Scheduled for Dec. 15-16

NEW BEDFORD, Mass. — Alex Unger, president of Ace Cabinet Corp. here, announces that an "open house" will be held at the new plant on Dec. 15 and 16, 1947. All distributors, ice cream manufacturers and dealers are invited.

New products now in production will be on display. Special meetings will be held to explain all new developments.

The meeting will be climaxed by a banquet on the night of Dec. 16.

# WORTHINGTON

## Air Conditioning and Refrigeration Report

Worthington Pump and Machinery Corporation, Harrison, New Jersey

## WORTHINGTON FREON-12 COMPRESSORS COMBINE COST-SAVING INSTALLATION AND OPERATION



Pleasingly streamlined, the new Worthington Freon-12 Compressors are sturdy but light, compact but easily accessible, unusually quiet and efficient in action. And their low initial price is joined by minimum operating costs over a long service life.

### Features for Better Performance

Automatic capacity control... scientific balancing of moving elements... large crankcases and positive lubrication... lightweight, automotive-type pistons... Worthington Feather\* Valves—quietest,

simplest, most efficient ever made.

### Self-Contained Units

Worthington Freon-12 Compressors, from 3 to 125 hp, are also available in self-contained compressor and condenser units, with Worthington Multi-V-Drives, special motors and safety controls, for economical installation and maintenance in all types of air conditioning and refrigeration service. *Worthington Pump and Machinery Corporation, Harrison, New Jersey. Specialists in air conditioning and refrigeration for more than 50 years.*

\*Reg. U. S. Pat. Off.

**WORTHINGTON**

Air Conditioning and Refrigeration

"They're Freezing Down South... with Worthington Refrigeration"



In addition to 2,000 lockers the new, ultra-modern Lawson Frozen Food Locker Plant in Columbia, S. C., has a large blast-type freezer room and rooms for processing and storing salt meats and poultry. Other features are a smoke house, offices and display space. In the basement a zero degree F. room is being built for bulk and job lot storage.



Locker rooms in the Lawson plant are kept at 0°F. Temperatures for the salt meat rooms are maintained at 38°F by Worthington refrigeration equipment. This includes five 5x5 VSA ammonia remote-type units, one 4HF ammonia booster, together with an evaporative condenser, sub-cooler and oil separating equipment, etc.—all supplied through the Palmetto Air Conditioning and Refrigeration Co.



Mammy's Shanty, famous restaurant in Atlanta, Ga., is Worthington-equipped with a low-temperature refrigeration system handling: a sharp freezer room; a zero degree F. general storage room; and a 34°F. meat storage room. This efficient, economical installation consists of two air-cooled units, Freon-12, of 1½ and 2 hp, respectively. Mr. Allen Stewart, owner, writes: "We can heartily recommend your equipment."

### Another Reason Why

There's More Worth in Worthington

Making more of the "inner vitals"—compressors, condensers, turbines, pumps, valves, fittings—Worthington is better able to give you a completely integrated air conditioning or refrigeration system. See your nearby Worthington Distributor for detail.

Supreme  
in the art of  
Shaft Sealing!

## ROTARY SEAL REPLACEMENT UNITS FOR



UNIT NO. 9444

Commercial, Semi-Commercial, Air Conditioning and Household Refrigerator Compressors. "Seal with certainty" with ROTARY SEALS.

Available for over 848 models as shown on our stock list and carried by all leading jobbers.



2020 NORTH LARRABEE STREET • CHICAGO 14, ILLINOIS, U.S.A.  
CANADIAN AGENT: 2025 ADDINGTON AVENUE • MONTREAL, QUEBEC, CANADA



## Iceberg Locker Systems Names 13 Distributors Throughout 11 States

NEW YORK CITY—Appointment of 13 new distributors for Iceberg Refrigerated Locker Systems, Inc. here has been announced by F. C. Margolf, sales manager. A list of the new distributors follows:

Albany Garage & Appliance Co., Albany, N. Y.; Audrian Refrigeration Co., Bloomfield, N. J.; Keil Motor Co., Wilmington, Del.; Northern Refrigeration Co., Montpelier, Vt.; Harry J. Sturm & Co., Philadelphia.

Refrigeration Service Co., Birmingham, Ala.; Virginia Air Conditioning Co., Inc., Lynchburg, Va.; Southwest Distributors Co., Wichita, Kan.; Gustafson & Larson Co., Sioux Falls, S. D.; Wilderman Distributing Co., Seattle.

Shirar Young Refrigeration Corp., San Francisco; Economy Frozen Food Locker Stores, Los Angeles; and General Refrigeration Service Co., Santa Maria, Calif.

## Axtater & Stuewe Formed As Mayer's Distributor

CHICAGO—Axtater & Stuewe Co. has been formed here to act as sole distributor and sales agent for Mayer Mfg. Co., Chicago, manufacturer of complete soda fountains, bobtails, and creamers of all sizes.

Edward Stuewe is general manager of the new company and William Axtater is sales manager. Both were with Super-Cold Midwest, Chicago.

## Bond's Air Conditioned Plant Uses Thermopane

ROCHESTER, N. Y.—More than 75,000 sq. ft. of glass of various types, intended to be functional as well as decorative, is being installed in the new, air conditioned clothing factory, store, and boiler house of the Bond Stores, Inc. plant here.

Outstanding uses of glass in the plant include:

An expanse of polished plate glass 11 ft. high and 200 ft. long on the north exposure of the main factory building to admit daylight for inspection purposes.

A two-story feature window in the lobby facing the main entrance which is made of Thermopane insulating glass to reduce heating and air conditioning costs.

An area of plate glass 140 ft. long that forms a visual front for the store.

## Household Appliance Dealers Sales Up 1% for September

WASHINGTON, D. C.—Sales by the nation's independent household appliance dealers in September were 1% above those for August and 40% higher than those for September a year ago, the Bureau of the Census reported.

Their sales for the first nine months of 1947 increased 53% compared with the same period last year, according to the bureau's retail trade report.

A 34% increase in sales was scored by independent radio-household appliance dealers during September this year as compared with 1946.

## CLASSIFIED ADVERTISING

RATES for "Positions Wanted" \$2.50 per insertion. Limit 50 words.

RATES for all other classifications \$5.00 per insertion. Limit 50 words.

ADVERTISEMENTS set in usual classified style. Box addresses count as five words, other addresses by actual word count.

### POSITIONS WANTED

REFRIGERATION ENGINEER, age 30, high school and trade school graduate. 14 years experience commercial and industrial refrigeration. Erecting, estimating, selling, management, installation and service. "Freon" and ammonia. High and low temperature. Highest type references. Desires position with well established dealer or manufacturer in East. BOX 2562 Air Conditioning & Refrigeration News.

REGISTERED SALES engineer-manager. 19 years experience air conditioning, refrigeration, heating, all phases design, estimating, purchasing, installation; ability to engineer, sell and prosecute small or large contracts. Desire connection with concern specializing in above fields having national line of equipment, preferably Airtemp. Available January 1st. BOX 2571 Air Conditioning & Refrigeration News.

### POSITIONS AVAILABLE

IMMEDIATE OPENING for experienced cabinet designer for design work on low and moderate temperature refrigeration cabinets. Minimum of 10 years experience required. Write stating qualifications, references and salary. BEN-HUR MFG. CO., 634 East Keefe Avenue, Milwaukee, Wisconsin.

SALESMEN WANTED—Sell in North Florida in pleasant climate the year around for old established concern. Housing available. Straight commission nationally advertised line. Experience necessary in selling commercial refrigeration and other store equipment. Must have car. Write and give references P. O. BOX 921, Pensacola, Florida.

FACTORY REPRESENTATIVE to headquarter Detroit and travel entire country promoting commercial refrigeration sales through dealer contacts and regional meetings. Nationally advertised line includes domestic home freezers. Excellent earning possibilities. Experience in specialty selling and/or refrigeration essential. Reply with brief particulars for further negotiation to BOX 2534 Air Conditioning & Refrigeration News.

MANUFACTURER'S AGENT for established nationally known line of commercial refrigeration equipment including beverage coolers, beer dispensers, milk coolers, etc. to dealers in states of Texas, Oklahoma, Arkansas, Louisiana and Mississippi. Give complete background, references and lines now handling in first letter. BOX 2554 Air Conditioning & Refrigeration News.

SALESMEN WHO are now calling on refrigeration dealers to sell a fast moving and popular show case in all parts of the United States. Commissions or salaries can be arranged, must be a live wire. State present line now representing and references. For full particulars, write BOX 2555 Air Conditioning & Refrigeration News.

FACTORY REPRESENTATIVES wanted by leading manufacturer of complete low side and condenser lines. Company products are nationally advertised and enjoy excellent reputation. Territories now open Southeast, Central, South Central and Northeast. Our men have been informed of this ad. BOX 2561 Air Conditioning & Refrigeration News.

ENGINEER: WELL known commercial refrigerator manufacturer located in East is expanding engineering Division and interested in securing services of a young man to assist Chief Engineer and to take charge of test room. Write full details. Replies held in strict confidence. BOX 2564 Air Conditioning & Refrigeration News.

CHRYSLER-AIRTEMP four star dealer in Northern Ohio requires top notch refrigeration engineer for position of application engineer. Must be sales minded and experienced in all types of cooling from residential to commercial installations. Write full particulars in first letter to BOX 2568 Air Conditioning & Refrigeration News.

CHIEF ENGINEER on household refrigerating equipment. Must have very thorough experience in technical and administrative work in this line. For company in desirable city in Middle West. Reply to BOX 2570 Air Conditioning & Refrigeration News.

### EQUIPMENT FOR SALE

MOTORS AND condensing units—available at once—1/4-1/2-1/2-1/2 Universal condensing units with or without motors. Special—six hole ice-cream cabinets with 1/4 hp. Copeland units less motors \$225. Also beverage coolers, beer equipment, stainless steel reach-in freezers. ALBROD CORP., 319 West 48th St., New York City 19, CI 6-9100.

LIQUIDATING \$70,000 stock of 22-32-40-60-80 cu. ft. reach-ins, remote and self-contained models; all sizes of condensing units, electric water coolers, freezer plates, electric meat slicers, meat choppers. At less than factory prices. A real opportunity. Write AMERICAN COMMERCIAL EQUIPMENT CO., 4150 Holly Knoll, Los Angeles 27, California. Normandy 0450.

FOR IMMEDIATE disposal—large quantities of compressors. 1 1/2 stroke, 1 1/2 bore, suitable for 1/2 and 1/2 horse power condensing units. For complete information regarding price and delivery—C. C. CAWTHORNE & COMPANY, INC., 1100 Morris Avenue, Union, New Jersey.

SELLING OUT: used (as is) and rebuilt Frigidaire and Kelvinator condensing units with new s. p. capacitor motors. Write for list. EDISON COOLING CORP., 310 E. 149th Street, Bronx 51, N. Y.

QUALITY BOBTAIL fountains: reach-ins, walk-in boxes—wood, metal; dough retarders; double duty cases—stainless steel, porcelain; dairy, florist, bakery cases; ice cream hardening cabinets; thermopane frozen food cases; milk, sandwich coolers; stainless steel back bars; with machines. Equipment made to special order. FRIGITEMP CORP., 931 Bergen St., Brooklyn 16, MA 2-9093.

BEVERAGE COOLERS—Factory rejected, minor outershell imperfections, mechanically perfect, standard factory guarantee. Complete with coils and air-circulating blower. Priced at: 6 ft. length—\$160. (FOB Philadelphia), 8 ft. length—\$195. (FOB Philadelphia). Write to GENERAL REFRIGERATOR COMPANY, 856 North Broad Street, Philadelphia 30, Pa. Phone: STEVENSON 4-1144.

FAIRBANKS BEAM scales—New, attractively priced, these high quality. 600 lb. capacity, beam scales can be delivered immediately. Quantities: 1 to 5, \$25.00 each; 6 or more, \$23.60 each. (FOB Philadelphia). Place your order today, write to GENERAL REFRIGERATOR COMPANY, 856 North Broad Street, Philadelphia 30, Pa. Phone: STEVENSON 4-1144.

FORTY ONE 15 and 20 ton new shell and tube Bell & Gossett "Freon" water cooled condensers. \$160.00 and \$200.00 each. GEORGE HILGER CO., INC., 8444 So. Racine, Chicago, Illinois.

SACRIFICING 100 brand new double pipe 1/4 and 1 HP Wolverine all copper tube-within-a-tube water cooled condensers. \$14.00 and \$16.00 each. (FOB Chicago, Illinois). Write or wire GEORGE HILGER CO., INC., 8444 So. Racine, Chicago, Illinois.

IMMEDIATE DELIVERY at distributors discount—eight 21 cubic foot reach-in cabinets, 2 glass doors; four 30 cubic foot reach-ins, 2 glass doors; sixteen 40 cubic foot reach-ins, 3 glass doors; eight 60 cubic foot, 5 glass doors; four 80 cubic foot, 7 glass doors. Complete. LOUDON SALES, INC., 2524 - 27th Avenue South, Minneapolis, Minnesota.

WALK-IN COOLERS, sectional. Kilm-dried fir throughout. 4 in. fibre glass, natural finish, \$.95 per sq. ft. Beer coolers, \$.85 per sq. ft. Cooler and freezer doors as low as \$36.50. No extra charge for special sizes. Florist boxes. Wholesale only. MIDWEST MANUFACTURING CO., 101 Glenwood, Minneapolis 2, Minn.

MOTORS FOR sale, from stock. Jack & Heintz, others at list; discount on quantity purchases. Special prices on scheduled deliveries. Fractionals and integrals, AC and DC. Send in your specific inquiries. MODERN SUPPLY COMPANY, 206 Fulton Street, New York 7, N. Y. CO. 7-0100.

REACH-INS—30 cubic foot refrigerators. All stainless steel inside and out with blower coil. With 2 large doors. Machine compartment below. Ten available. Act quickly. \$270.00. Unit extra, \$89.00 each. PITTSBURGH CASE SALES CO., 212 Fancourt Street, Pittsburgh, Pa.

SACRIFICING BRAND new Copeland and other top brands. Condensing units in original crates. 1/4, 1/2, 3/4, 1 HP air-cooled. 1 1/2 and 3 HP water-cooled. All priced for immediate clearance. Write or wire now. ROCHELLE REFRIGERATION COMPANY, 31 East 4th Street, New York 3, N. Y.

JORDON R-42 cubic feet dual temperature 4 door reach-ins. Also Jordan 30 cubic foot stainless 2 door reach-ins with ice maker. Sacrifice both items \$235.00 each less compressor. Also Jordan 16 SC Frozen Food Cabinets group C (remote) \$125.00 each less compressor. ROYAL REFRIGERATION COMPANY, 5312 West Pico Blvd., Los Angeles, California.

SEALED CROSLLEY TERMINALS. Installed from the outside in a few minutes without opening the compressor. Corrects leaky terminals on all Croslley "F-12" units. Set of three \$5.25 (Part No. 1020). Installation tool 20¢. Immediate delivery. Money-back guarantee. SEALED UNIT PARTS CO., 3097 Third Ave., New York 56, N. Y.

EXCELLENT BUY: 25 ton vertical twin cylinder 9" x 15" Buffalo ammonia compressor complete with belting, receiver, and double pipe condenser. Also 50 HP variable speed slip ring Westinghouse induction motor, 3 phase. Double pipe cooler. Fittings and parts included. \$2100.00 complete as is FOB WATERFORD WINERY, Waterford, California.

FOR SALE at reduced prices—60 Panelectric Cuberators—automatic ice cube makers ideal for small bars and clubs where retail liquor sales not restricted. All new and excellent condition. Write for particulars. E. A. WATTEBURG, 201 Westlake North, Seattle 9, Washington.

FOR IMMEDIATE disposal—surplus material as follows: 633# soft copper strip, .078 x 1 1/2". 2200# hard copper strip, .010 x 1 1/2". 2000# hard copper tubing, .375 OD x .315 ID. 620# soft copper tubing, .375 OD x .315 ID. For complete information regarding prices and delivery—P.O. BOX 497, Elizabeth, New Jersey.

AIR CONDITIONING equipment—McQuay 3-5 ton ST-25 4 row coil 1/4 HP, 3 phase motor \$518.00. Comfort coolers 13-1 ton \$133.00; 11-1 1/2 ton \$156.00; 9-2 ton \$184.00; Mills compressors—7.5 HP, 3 phase \$556.00; 2-3 HP single phase \$380.00. BOX 2566 Air Conditioning & Refrigeration News.

### BUSINESS OPPORTUNITIES

FOR SALE: Established air conditioning refrigeration and engineering business. Have National franchise for this and another state for refrigeration. Stock about \$60,000. More than \$300,000 yearly profit over \$50,000—1946. Building available reasonable rental or purchase. Retiring. Would sell invoice price. Would take approximately \$40,000. LESLIE CONNER, Hightower Building, Oklahoma City, Oklahoma.

MIAMI, FLORIDA—one of leading refrigeration, air conditioning, and appliance sales and service establishments—in same location ten years. Over \$150,000.00 yearly sales. Business with profitable past and unlimited future. Netted over \$20,000.00 past year. Located in fastest growing city in U.S.A.—Miami. Inquiries confidential. BOX 2565 Air Conditioning & Refrigeration News.

FOR SALE—Well equipped refrigeration service shop in Southern California. Close to downtown Los Angeles. Fine commercial & domestic accounts. Three year lease at \$40.00 per month. Will sell for cash \$1500.00 plus inventory. For further information write BOX 2567 Air Conditioning & Refrigeration News.

FOR SALE: Established refrigeration, air conditioning, heating, plumbing, appliance business. Twenty-one franchises nationally known products, some exclusive. Service shop completely equipped, manned. Stock, equipment approximately \$10,000. Long low-rental lease, with option. Situated main highway, suburban community, industrial city. Reason for selling, other interests. BOX 2569 Air Conditioning & Refrigeration News.

### SCHOOLS

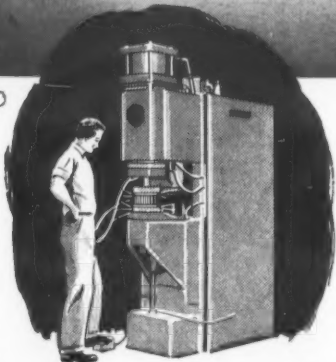
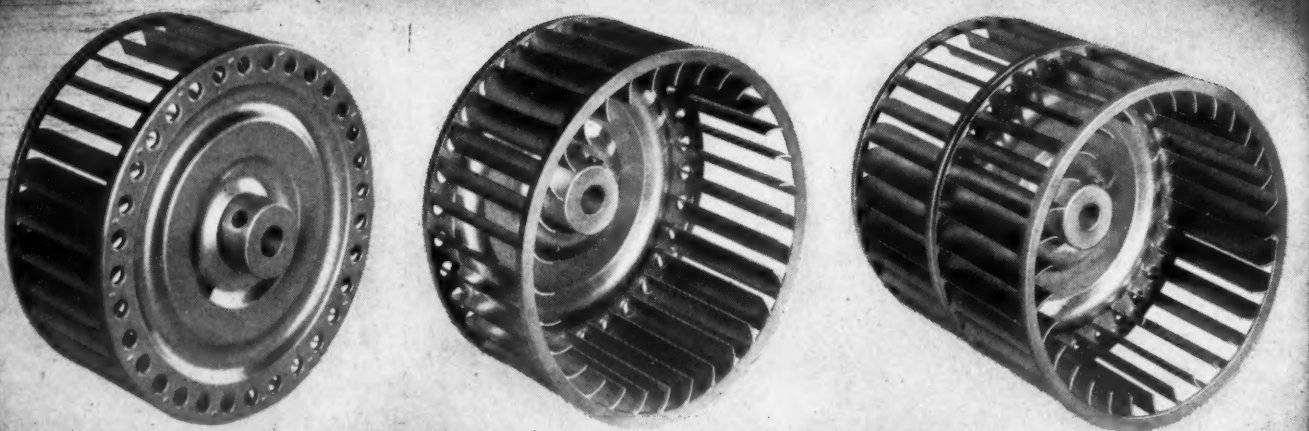
NEW FULL or part time classes in advanced refrigeration, air conditioning, and heating to start December 2nd. Enrollment now. G. I. approved. Men with high school education or experience or basic training in refrigeration, air conditioning, or heating preferred. DETROIT AIR CONDITIONING INSTITUTE, 4125 Grand River Avenue, Detroit 8, Michigan.

## WANTED

Individual with capital, or established company who will set up separate operation, for distributorship of new line of nationally prominent manufacturer. One franchise issued in each territory. The product is spoilage-prevention equipment sold direct to food processors, restaurants, butchers, beverage plants, packers, dairies, etc. Investment in merchandise required.

Write full details. Box 2557, Air Conditioning & Refrigeration News

## Newest development in BLOWER WHEELS for oil burner, stoker, and air conditioning applications



The New Lau "WELDWHEEL" is the result of several years of concentrated engineering to produce a better performing, competitive-priced product. Its parts are welded together by electrical control and with greatest precision possible so that the proper amount of heat and correct pressure are developed to produce a strong, sturdy wheel to fit your exacting requirements. Its better performance gives you wider range of operation and better pressure characteristics. Furnished with standard hub or with hubs adaptable to Lovejoy or Guardian couplings. Standard hub bores 1/2-inch and 5/8-inch. Wheel width (or length) 1-inch up to 4-inches in single inlet. This wheel is available for immediate delivery in 5-inch, 6 1/4-inch and 7 1/2-inch diameters.

Write for prices and further information.

# THE LAU BLOWER COMPANY

Dayton 7, Ohio, U. S. A.

WORLD'S LARGEST MANUFACTURER OF FURNACE BLOWERS

Engineers and fabricators of general Air Handling Equipment • Blower Assemblies • Blower Wheels • Propeller Fans • Accessories



## Distributor Uses Merchandising Conference To Acquaint Dealers with His Services

MILWAUKEE—A two weeks long "Merchandising Conference and Parade of Stars" supplanted the traditional "open house" celebration at the opening of Roth Appliance Distributors' new enlarged quarters at 647 W. Virginia St. here last month. Though 500 Wisconsin and Upper Michigan appliance and radio retailers attended the conference, only 15 or 20 were on hand at any one time, W. H. Roth, president, declared.

Handling the dealers in small groups like this permitted Roth executives and department managers to give personalized attention to each dealer's particular merchandising problems and to agree upon a local merchandising program with him, Mr. Roth, explained.

During the conference, emphasis was placed on acquainting the dealers with the complete, one floor, one stop operation of the distributor's new headquarters, covering 12,000 sq. ft. of space, and with the range of services available to them.

These services include, according to Mr. Roth, executive assistance on product information, advertising and sales promotion, and sales training for each product line carried by the firm, a streamlined teletype warehouse service, private credit consultation service, and the modern equipped service and parts departments.

The program also attempted to familiarize each dealer with the importance and function of the various merchandising methods that make for greater business. Each dealer was provided with a merchandising manual that contained brief resumes of all this material.

Thus, the occasion was designed to be more than a "glorified fanfare of flag waving" over the opening of the enlarged quarters, Mr. Roth said.

In his greeting to the dealers at the opening of each session, Mr. Roth declared that he expected the "inevitable competitive period" to be only a few months ahead.

He suggested that if they were too busy with management problems to get out and sell, they "must start at once, now, to find the right type of young man or men whom you can



Michigan, Wisconsin dealers look over Roth Appliance Distributors' new facilities.

train to do the job for you and assure for you a greater return on your investment.

"Remember you cannot wait until you are in the midst of the competitive picture" to do this, he warned.

He pointed out that the merchandising manual that was given them discussed the need for proper financial structure, sales personnel, sales training, display, personal selling, telephone canvass, advertising, and information about the products being sold.

### Page Air Conditioning Opens New Showrooms, Offices

CHARLOTTE, N. C.—Page Air Conditioning Co., Inc., announces the opening of their new showrooms and offices at 439 South Tryon St. More space is available at the new location, according to the management.

"We have re-opened our residential heating and air conditioning department," it was stated. "Circumstances over which we had no control forced us to close this department during the war."

### Kemp Equipment Sets Up First Branch In Buffalo

BUFFALO—Kemp Distributors, Inc., first branch office of a 30-year-old Rochester appliance concern, Kemp Equipment Co., has been established in Buffalo and will have wholesale sales and display rooms at 2387 Fillmore Ave., Manager Vincent A. Kenyon announced. Nationally known lines will be handled, he said.

## 1/4 H.P. G.E. MOTORS

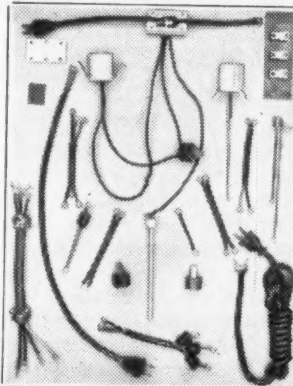
For IMMEDIATE DELIVERY!

F.O.B. our warehouse. \$21.18 EACH While They Last!

Our first sale of motors went like hot cakes. We are now able to offer a few hundred more General Electric 1/4 H.P. Capacitor Type motors with built-in overload protector, single-phase, 115V., 60 cycle, 1725 RPM.

We secured these through a most fortunate purchase and are offering them only to Refrigeration Service Dealers and Contractors because we realize the desperate need of them in the replacement field.

WRITE—WIRE—PHONE  
YOUR ORDER TODAY



### PRODUCTION MANUFACTURERS

ELECTRICAL WIRING HARNESSES AND DEVICES FOR  
REFRIGERATORS ELECTRIC RANGES  
WASH MACHINES APPLIANCES  
AUTOMOBILES RADIOS

Insulated wire cut and stripped to your specifications, cord sets, heater cords and extension cords. Send us your print or sample.

IMMEDIATE DELIVERY

RIVERSIDE MANUFACTURING CO.  
PHONE 288-2934-3175  
200 S. RIVER ST., YPSILANTI, MICHIGAN

## For LIQUID COOLING HEAT-X CAST ALUMINUM COOLERS



HEAT-X Cast Aluminum Coolers are simple, sanitary and compact. They require but a small refrigerant charge. All connections are plugged for shipping. Sanitary operation assured with all tubing embedded in aluminum. For Water Coolers, Soda Coolers, Beer Coolers, Cooler Carbonators and Heat Exchangers write:

**THE HEAT-X-CHANGER CO., INC.**  
415 Lexington Avenue, New York 17, N.Y. Brewster, N.Y.

## DIVE IN AND SEE COOL PROFITS



The Selb S-4 is a veritable "pearl" of a sales-getter for it sells on sight! This efficient refrigerated display case has oceans of uses... is perfect for bakery goods, wines, dairy products, ready-to-eat treats.

*Selb leads the way  
See it today!*



**SELB MANUFACTURING CO.** ARCADE BLDG., ST. LOUIS 1, MO.



## Fight Looms on Union Demand for Increase

(Concluded from Page 1, Column 3) of graphs analyzing the division of the income dollar during the war years and during "typical" years.

In each graph the income dollar was split between "purchases, taxes, etc." and employees' pay. What remained constituted the profit. Graphs covering the record during World War II indicated that G-E profits in 1942 were 4.2 cents on the income dollar, but dipped to a low of 3.5 cents the next year. By the end of 1945 the firm was making 4.3 cents profit per income dollar.

The year 1942 employees' pay took 39.1 cents of the income dollar, but this had steadily decreased to 31.5 cents by the end of 1945, the graphs showed.

During more "typical" years however, the story was this: In 1941 employees' pay required 33.1 cents and profit was at 8.2. In the first nine months of this year pay consumed 42.0 cents and profit 6.8.

"The ratio of profit to volume of sales is a significant figure," a General Electric spokesman stated. "It is from a third to one-half as much as it was pre-war because of a lower profit margin."

The full-page advertisement went on to point out that General Electric's function was to serve three groups of people—employees, stockholders, and customers. "We must preserve a fair balance between these three groups," a G-E statement declared.

One official added: "Although there have been two rounds of wage increases since the war, the return to stockholders have not been increased."

Admitting that "increased pay has not helped as much as it should because of inflation," the General Electric advertisement said:

"The better real wages can come only out of increased production and by checking inflation through a return to careful buying on the part of the consumer."

(Meanwhile a statement issued by the union made the claim that productivity of individual workers has increased 13½% since January, 1946.)

## General Manager



W. A. SIEGFRIED  
Elected vice president and general manager of Superior Valve & Fittings Co.

## Supply Wholesalers--

(Concluded from Page 1, Column 2) manufacturer's protection of wholesalers.

They agreed that manufacturers who are not too definite in their policy toward wholesalers should formulate one to protect the wholesaler in his territory and sales.

They also discussed the problem of who constitutes a refrigeration manufacturer and is entitled to the manufacturer's discount.

The feeling was that unless the refrigeration manufacturer bought in specified large quantities, he should not be entitled to that discount.

## 50-Cycle Motors Permit Export of Drink Coolers

NEW YORK CITY—Shipments on orders for beverage coolers destined for South Africa were completed recently after the arrival in New York of larger quantities of 50-cycle electric motors, according to officials of S. J. O'Brien Sales Corp. Motor shortages had held up the shipments.

## Credit Controls--

(Concluded from Page 1, Column 4) Bank & Trust Co., Des Moines, Iowa. He termed such restrictions "unnecessary" and "an unwarranted encroachment into the fields of private business."

Addressing the consumer credit division of the Michigan Bankers Association, Mr. Plummer said:

"We are told that credit controls will restrain the public from buying things that they should not have or do not need, and that they will thereby encourage thrift, so that the money saved can be put in savings accounts or invested in bonds."

"Gentlemen, to me that is a lot of bunk. . . . On the contrary, I believe that credit controls with restricted terms encourage the average individual to cash in his savings bonds or withdraw his savings deposits in order to purchase the merchandise."

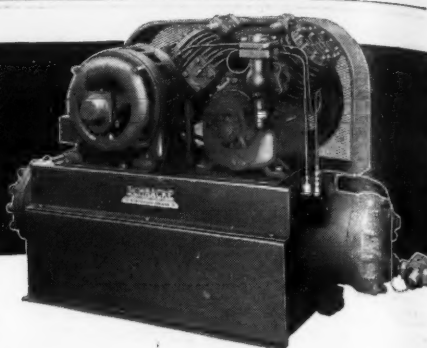
Consumer credit "is one of the safest assets in any bank portfolio," declared Mr. Plummer, who is also chairman of the consumer credit committee of the American Bankers Association.

## Gibson Refrigerator Co. Earnings \$2,153,800

GREENVILLE, Mich.—Gibson Refrigerator Co. here has reported net earnings of \$2,153,800, equal to \$3.59 per share, for the year ended July 31. This is in contrast with a net loss of \$43,276 for the preceding year.

This year's sales were \$22,278,682, compared with \$8,529,094 for the previous year.

## SCHNACKE Complete CONDENSING UNITS



SCHNACKE units have replaceable refrigerant-cooled steel cylinder sleeves, complete pressure lubrication, balanced forged crankshafts, individual cylinder liquid relief, individual cylinder valve cage assemblies, built-in suction strainers, sealed crankcase, balanced pressure shaft seal, insert type bearings, water or air cooled heads, and many other advanced features.

Condenser is ASME approved, fin tube, cleanable type mounted in sturdy base. Water control valve and pressure controls installed.

Illustrated above is the "T-C" Model, with capacity from 5 H.P. low temperature to 15 H.P. Air Conditioning. F-C Models to 25 H.P. available; less condenser, from 5 to 50 H.P.

Our new foundry now makes deliveries on most models possible in one to two weeks.

Complete engineering data sent promptly upon request.

**SCHNACKE, INC.**

1016 E. Columbia St., Evansville, Ind.

## WANTED SALES AGENT

Manufacturer of refrigeration, air conditioning, heating and ventilating equipment is appointing individuals to handle these lines in territories that embrace one or more states. We are delivering our 1948 models now. Air conditioning equipment available in sizes ¼ ton to 50 tons.

Director of Sales

Chicago **HEAT-MASTER Company**

506 S. Wabash Ave.

Chicago 5, Illinois



MODEL 3900



## "A SURE HIT"

It's bound to be a sure hit for any dealer looking for an opportunity to raise his sales average. FOGEL'S Dry Storage "Bottled Beverage" Cooler out hits all other coolers in dealer sales because it is . . .

1. Constructed of durable, all-welded steel.
2. Economical and efficient to operate.
3. Dry, clean, and modern.
4. A real space-saver.
5. Heavily insulated for complete customer satisfaction.
6. Engineered for heavy usage in all climates.

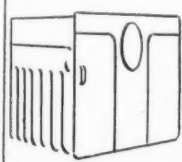
The FOGEL Dry Storage "Bottled Beverage" Cooler has outstanding eye appeal . . . eye appeal that means sales. It is so attractive that it can be used out in the open as well as under a bar. Feel welcome to write for further information concerning these, or other, FOGEL Quality-Engineered refrigeration items.

Now Available for Immediate Delivery

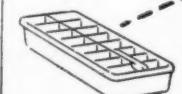
One franchise gives you a complete commercial refrigeration line.

**FOGEL REFRIGERATOR COMPANY**  
5400 EADOM STREET • PHILADELPHIA 37, PA.

Quality manufacturers, for almost one-half century, of Display Cases, Reach-Ins, Walk-Ins, and Freezers.



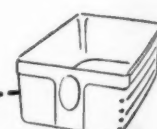
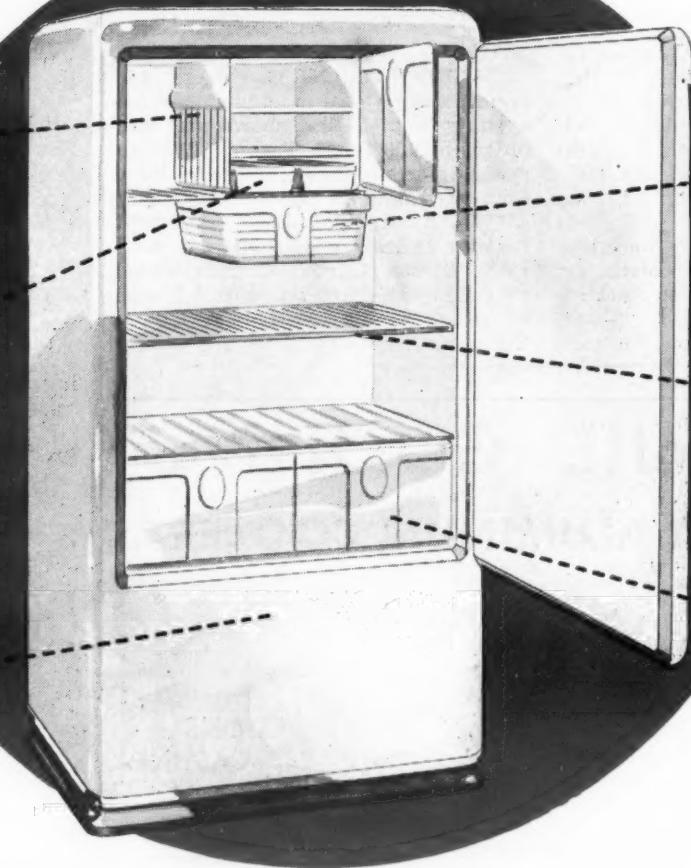
Alcoa Aluminum cooling unit gives quick, efficient transfer of heat.



Ice cubes freeze faster in Alcoa Aluminum trays, maintain ample cube supply.



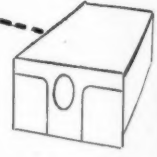
Alcoa Aluminum parts in the compressor increase efficiency, reduce wear on parts and bearings.



Storage trays of Alcoa Aluminum are friendly to food, easy to clean.



Alcoa Aluminum shelves are light in weight, sanitary, sturdy. Easy to clean.



Alcoa Aluminum hydrator pans keep foods fresh and crisp, cannot rust, are friendly to food.

## LOOKING FOR SELLING FEATURES?

Put **ALCOA ALUMINUM** to work

Add the efficiency, beauty, and sanitary advantages of Alcoa Aluminum to your refrigerator. These are selling features that your dealers can merchandise to the housewife . . . and her husband.

The high thermal coefficient of Alcoa Aluminum . . .  $k = 1,509 \text{ Btu/hr.}/\text{ft.}^2/\text{inch}/\text{degree F}$  . . . gives coils, evaporators, and condensers greater thermal pull-down. Makes refrigerators work more efficiently, reduces dead load on motors and compressors.

Aluminum is friendly to food, is the ideal

material for meat storage trays, hydrators, ice cube trays, and other parts that are in contact with food. Easy to keep clean, sweet, and bright. Attractive, too.

And Alcoa Aluminum can never rust, chip, nor crack. Is smooth and strong.

Alcoa's engineers will gladly help you put more aluminum into your refrigerators to add more selling features. **ALUMINUM COMPANY OF AMERICA**, 1975 Gulf Building, Pittsburgh 19, Pennsylvania. Sales offices in 54 leading cities.

MORE PEOPLE WANT MORE ALUMINUM FOR MORE USES THAN EVER

**ALCOA** FIRST IN **ALUMINUM**

IN EVERY COMMERCIAL FORM

